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# ROYAL COMMISSION ON TRANSPORTATION

Report

VOLUME II  
DECEMBER 1961



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Canada

# ROYAL COMMISSION // ON TRANSPORTATION

Report of the Royal Commission on Transportation

Report  
MAY 12 PLATEAU, YUKON TERRITORIES  
valued more highly so

Transportation regulation by the provinces is now no longer  
desirable, given the existing planning framework, the nature of  
the economy and the need for the resources of all the provinces  
to be used effectively with particular reference to the national

VOLUME II  
DECEMBER 1961

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VOLUME II

To His Excellency the Governor General in Council,

MAY IT PLEASE YOUR EXCELLENCY,

We, the Commissioners appointed by an Order in Council dated 13th May, 1959, to inquire into and report upon the problems relating to railway transportation in Canada and the possibility of removing or alleviating inequities in the freight rate structure:

BEG TO SUBMIT TO YOUR EXCELLENCY  
VOLUME II OF OUR REPORT



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We are grateful to Mr. Pierre Daviault of the Bureau for Translations who supervised the translation of the Report into the French language. Volume I (French) was edited under the guidance of Major Lafrance and Mr. R. Fortier, and Volumes II and III (French) by G.P. Boucher of the Department of Agriculture.

General editorial supervision of Volumes II and III<sup>1</sup> was provided by Dr. D.W. Carr.

<sup>1</sup> Volume III will be published at a later date.

## INTRODUCTION TO VOLUME II

The investigations conducted by this Commission have led us to conclude that the problems which beset transportation in Canada, and in particular railway transportation, arise, in large part, out of difficulties encountered in adjusting to the recent development of competition in transportation. We believe that a solution to these problems requires basic changes in both public and private attitudes and policies. In the first volume of our Report we delineated the four main areas where it was apparent that traditional obligations in law and public policy placed burdens upon railways which they can no longer bear equitably as instruments of national policy. We set out there the measures necessary in public policy to correct the imbalance against this particular mode of transportation. We indicated also that the new environment called for a different approach in the national policy respecting transportation and that competition itself demanded the construction of a different national transportation policy.

In the competitive environment in which the transportation system now operates it has become necessary to develop a clearer distinction between the terms National Policy and National Transportation Policy. Although the Terms of Reference guiding our investigation have required that consideration be given to both, a distinction is necessary because we wish to emphasize at the outset that the assessment of National Policy objectives for economic development, national unity, social welfare or for any other purpose is, in our view, a matter which is very definitely not within our Terms of Reference. We regard our area of responsibility to be confined, first, to recommending guides to action in developing a National Transportation Policy, which is concerned with the effectiveness of transport itself, and second, to pertinent observations respecting the effects upon it of National Policies making use of transportation to achieve their particular objectives. This dual focus of our responsibilities, distinguishing clearly between National Transportation Policy and National Policy, furnishes the structure for this second volume of our Report.

Accordingly, in Part I of this volume attention will be directed to the principles essential to an effective National Transportation Policy; to examining why the old National Transportation Policy based primarily on conditions of monopoly is no longer appropriate; and to setting out the modifications necessary in National Transportation Policy to take account of the rapid and continuing growth of competition. In Part II we consider the effects, on National Transportation Policy, of National Policies used to achieve particular objectives.

It is implicit in our Report that the objective of a National Transportation Policy shall be to ensure that the movement of Canadian goods and people is effected in a manner which utilizes fewest economic and human resources. This is merely to say that, given the preferences of those people who wish to move themselves or their goods, the movement shall be accomplished as efficiently as possible. Broadly speaking, there are two methods for pursuing this goal. One is to permit the movement of goods and people to be administratively determined. Such an approach is foreign to the economic system accepted by our nation. It chooses to ignore the freedom of choice which, under free enterprise, remains the responsibility of the individual or business firm in the conduct of affairs. The alternative is to rely so far as is possible upon the market decisions of individuals both in providing the services of transport and in using those services.

It is our conviction that the optimum use of resources in transportation will be achieved, by and large, if each of the competing modes of transport is allowed to develop in response to the demands of the shippers for its services. However, to state this principle is one thing, to attain it, another. The efficient provision of transportation service is an increasingly complicated economic and social problem. Differences in the nature of investment in each mode give rise to pricing practices which may not be conducive to optimum stability in the provision of service or to optimum rates. The institutional rigidities that attend any human activity may inhibit the integration between the modes which would render maximum efficiency. In principle it can be said that efficiency requires that traffic be distributed among the various modes in such a way that, with a minimum use of total economic resources, each provides the service in which it has the greatest comparative advantage. Efficiency also requires that each business firm providing a transportation service shall be free to reap the rewards of managerial wisdom and technological skill; and this carries as a concomitant feature, managerial responsibility for inefficiency. Where maximum efficiency in service and resource use demands integration between the modes, regulation should not inhibit the process.

The task then is to ensure that these objectives will, as far as possible, be approximated through the mechanism of the market. Generally speaking, this requires that National Transportation Policy shall endeavour to be neutral in its effect upon the provision of transportation service. This, of course, does not imply that policy should be negative — a posture of neutrality cannot be maintained without continuous and positive activity. It is, moreover, part of the Canadian tradition that public policy shall undertake some forms of investment which encourage individual private enterprise. In other words, where it is obvious that the market mechanism does not provide a satisfactory standard due to physical or technological limitations, or available market size, the market mechanism shall be complemented by public policy. There are many examples of this in Canadian economic life and particularly in Canadian transportation. To cite only the most obvious we have recourse to the history of public grants towards the construction and maintenance of railway transportation and to the provision of highway, seaway, airport and navigational facilities.

Although the responsibilities laid upon us by the Terms of Reference have particular bearing upon railway transportation, we must of necessity broaden our consideration to those other modes which are competitively related to railways. This involves us in some consideration of national transportation policy regarding the provision of highway transport in particular; but the principles which we have evolved are, we believe, broad enough to be a consistent guide for a National Transportation Policy for all modes, within the range of effective competition. Beyond that range, public policy has a responsibility to the users of transportation to act as a substitute for competitive market forces, permitting to the efficient carrier the conditions for investment and returns essential to induce maintenance of the necessary transport functions. It was our conclusion, embraced by the first volume of the Report, that public policy must, in four major areas, redress the competitive imbalance against the railways as a first step towards effective allocation of resources in transportation.

Part II of this volume analyses in some detail the impact of National Policy upon the transportation system in Canada. The analysis contains an assessment of the effects of past national assistance to transportation, and the problems pertaining to transportation which have arisen within national policy with the arrival of highway competition. Following on that analysis, several regional and industry policies making use of transportation are examined in the light of their effects upon the National Transportation Policy. Certain recommendations follow which will, in our view, ease the strain upon shippers at the extremities of the nation and prevent expensive and contradictory measures which tend towards the inefficient provision of transportation.

To many who appeared before us, these individual policies relating to regional and industrial problems were deemed to be the National Transportation Policy. Our position, however, is that a clear distinction has to be drawn between the objectives of a National Policy which uses transportation to achieve certain ends, and the objective of the National Transportation Policy – which we deem to be efficiency and economy in the transportation system. To make the distinction is not to attempt to judge which is the most important. We reiterate that our Terms of Reference do not empower us to evaluate the purposes of those policies which use transportation as a means to another end. We are able to suggest that it is not unwise to use transportation, properly applied, as an instrument for the pursuit of National Policy objectives, particularly in a setting where great distances are a limiting factor to balanced national growth. It may be that, in future, National Policy for development of resources, industries, or regions will go even further than at present in taking upon the shoulders of the nation a share of the burdensome costs of distance. However, if a National Policy of development should continue further in this direction, either as a substitute for other tools of development such as fiscal and monetary assistance, or in conjunction with them, we submit that transportation assistance must be undertaken deliberately, knowingly, and with the fullest determination of its true costs. Moreover, it should be undertaken in a manner which will see the benefits, to the fullest extent, resting where they are intended to rest. This means, more specifically, that any benefits which accrue to any carrier from the policy shall be requisite to the service performed, not more and not less.

Accordingly, the second part of this volume will conclude with an examination of the circumstances wherein transportation may properly be used, in our view, as an instrument of national development. There we shall attempt to set out the conditions which should apply in conformity with the objectives of the National Transportation Policy when public investment in transport facilities is to be used to stimulate regional or industry development.

In general terms, the National Transportation Policy, as we see it, should be designed to create conditions which will permit each mode, and each firm within each mode, to obtain that share of the growing volume of traffic which, on the basis of inherent competitive advantage, it is entitled to. In short, the objective is a healthy national transportation industry neither too sleek and fat by contributions from the public in excess of those required to have the function performed, nor too thin by unbalanced or inadequate public treatment. The level of health attaching to any individual firm providing transportation service should reflect managerial and technical ability, and the function of public policy is to see that it is impartially responsible for neither.

Only when it becomes apparent that one mode of transportation cannot competitively survive should public policy, for clearly and obviously important national considerations, have to assume the responsibility for the survival of that mode. Certain implications of such a possibility, which is always contingent in a society of rapidly changing technology, will be suggested in a third part of this volume.



## **PART I**

### **NATIONAL TRANSPORTATION POLICY**



## STRUCTURE OF NATIONAL TRANSPORTATION POLICY

Almost every transaction which occurs in the life of the nation involves transportation as one element of cost. Thus, the material well-being of the nation is improved when goods are manufactured and services are rendered under conditions where the real cost of transportation is kept to the minimum necessary to provide fully adequate services. Lowering the cost of the service increases the ability of the nation to take advantage of resource location and to improve efficiency in the utilization of the other factors of production. Lower real costs are attained through adaptation and change.

Throughout the era of railway predominance the pace of technological change in land transport has been considerable, but measured and steady rather than spectacular. The introduction of new modes occurred but the use of them in significant fashion was not immediate. Since the end of World War II, particularly in the last decade, the application of rapid and continuing improvement in all modes of transport, and the construction of new ones, offered a range of services at a range of costs which inevitably gave rise to more intense competition in the provision of transportation. Vastly improved air services, construction of pipelines, the expansion of the St. Lawrence River system, the tremendous technological improvement in railway equipment and methods, plus the growth of the trucking industry as equipment improved and the highway network spread, has given the nation a range of services which has widened the horizon of choice within which individual businesses and industries may operate in planning production and supplying markets within Canada and abroad.

The appearance of a variety of modes of transport in active or potential competition for the provision of transportation service gives to individuals, businesses and industries a range of choice in standards of service and price which cannot help but improve the efficiency of production. In fact, so important is transportation to production that it is possible to take the view that the benefits which flow from plentiful and low-priced transportation are great enough to make it relatively immaterial whether the transportation function is discharged with maximum efficiency. Subscribers to this point of view would provide through public investment the conditions for a plentiful supply of all forms of transport service at prices which are not intended to cover the total cost of providing the service.

It must be acknowledged that this is an acceptable philosophy of transport if it could be demonstrated that the benefits which would flow to industry and the nation were greater than the inefficiencies which would result. Nothing in our experience, nor in the investigations we have made, lead us to conclude that the alleged benefits of such a scheme could be real or equitable. It amounts, in our opinion, to a scheme for income redistribution to the immediate benefit of users of freight services at the expense of the general taxpayer. We have rejected this philosophy on the *prima facie* grounds that it leads to inefficiency in the provision of transportation service and removes from the individual entrepreneur one responsibility for assessing the true costs of his production decisions. Individual entrepreneurial decisions which attend the productive process in a free enterprise economy lead to over-all efficiency when the entrepreneur's responsibility for the decisions is greatest.

Accepting these principles of individual responsibility as a basis for our conclusions, we also recognize that the nation, through its parliamentary institutions, may at any time and to any extent decide that the transportation costs to a given industry or a given region are too onerous. In these cases assistance has been extended and in some instances is still being extended. Decisions so to do are made for many reasons beyond the sphere of transportation considerations and do not fall within the ambit of our Terms of Reference. But, as a principle we are forced to adopt, when transportation assistance is so used it should be applied with the most judicious care to see that the objectives of the policy are not achieved at the expense of transportation efficiency. We are convinced that efficiency in transportation is essential to total efficiency in the nation. The costs of distribution are already a high part of total production cost. Therefore, it is necessary that public policy shall do what it can to promote the efficiency of transport services.

### **The Objective of National Transportation Policy**

Public policy in Canada should seek to create an efficient transport system. This we define as the objective of the National Transportation Policy. Opinions generally expressed before us concur in this definition. This objective we regard as of more importance than the preservation of any single mode of transport, or of any particular company offering the services of transport. Should it be apparent that a firm providing services of transport is unable to live under a policy which seeks to attain maximum efficiency, we state that the consequences of technology or economics must not be set aside to preserve any historical or preconceived ideas about the proper composition of the transportation industry.<sup>2</sup>

### **Elements of the National Transportation Policy**

The elements of National Transportation Policy necessary to work toward efficiency in transportation are few. Foremost is the reliance which may be placed upon competition to keep the industry efficient. In the present environment, and so far as we can foresee, the conditions are such that considerable reliance can be placed upon the individual decisions of carriers and shippers to promote the objective of efficient transportation in the nation. This does not mean that errors of judgement and the wasteful commitment of resources will be avoided by the dependence on free enterprise and the market mechanism, but nothing in our investigations and experience leads us to think that these errors would be any less likely to occur, or would be rectified more rapidly, under a system of complete public regulation. Thus, accepting the objective of efficiency and reliance upon competition to achieve it means accepting also the necessary corollary condition, which is flexibility and mutability — and the possibility of bankruptcy — in the individual firms comprising the industry.

In Canada transportation competition is not universally pervasive. It may not ever be sufficiently so to place complete reliance on it. The second element of National Transportation Policy, therefore, is to introduce regulation of a type and extent which attempts to do for the industry what universally pervasive competition would do.

In Canada national development has depended upon redirection of economic and business trends. Inevitably such redirection involves assistance to transportation and to users of transportation. The third element of National Transportation Policy, if the objective of efficiency is to be

<sup>2</sup> The only instance where an exception to the principle ought to be allowed is where it becomes obvious, for overriding national purposes, that one entire mode of transport cannot be allowed to disappear. Then public action to preserve or revive that mode should be undertaken with a clear understanding of the effects of this interference on total efficiency, and should, at the same time, resist with firmness the demands for comparable public assistance to other modes which would only compound the inefficiencies and increase the real cost of the transportation services.

achieved, requires that public assistance to transportation or users of transportation be rendered impartially by public authorities. In a federal state the corollary condition of co-operation at all levels of public policy and administration becomes essential for successfully achieving efficiency. This becomes especially true where policy has to be devised and executed for national growth within the context of limited transportation competition.

### Limitations of Competition

The nature of competition in transportation in Canada being what it is and trending in the direction which it appears to be, we recognize the fact that market forces cannot be relied upon absolutely to achieve the objective of the most efficient allocation of resources in transportation.

There are a number of reasons which force us to this conclusion. Some are associated with the historical role of transportation in the national development, the relative sizes of firms in the various modes which have developed, the minimum amounts and length of commitment of capital necessary to operate, the divided nature of regulatory powers in Canada, the unequal contribution of public investment, and other assistance to the various modes at all levels of government. Of these factors, some are amenable to change by public action if there is developed a greater degree of uniformity in public policy at all levels of government. Others, however, are the results of the economic and institutional structure of the various modes and are not susceptible to significant alteration by public action without the creation of instability and inefficiency.

Reliance on the efficacy of competition to bring about total transportation efficiency must be limited for some less obvious but equally cogent reasons. In any industry where a few firms are supplying the total product or service the condition of imperfect competition occurs. This condition can be sustained wherever other firms find it difficult to enter the industry, either because of the large amount of investment required in relation to the total market, or because of artificial regulatory control over entry. Whenever conditions exist which limit entry, prices may tend to become regulated by tacit or explicit arrangement. If these arrangements are private they will be primarily in the interests of revenue stability for the few firms, and at prices higher than would otherwise prevail. If the controls are public, the regulatory authority has the double, and often conflicting, task of attempting to limit monopoly or oligopoly price while trying to maintain revenue requirements and acceptable service standards. In the instances of a market small in relation to necessary investment (a condition sometimes referred to as a natural monopoly), the only solution for public policy is to limit the number of firms. If accompanied by rate control, such limitation is consistent with the objectives of National Transportation Policy, in these special circumstances. If such regulatory arrangements do not exist at all, pricing in imperfect competition may be so disorganized that severe instability will result.

This is the dilemma which faces those responsible for creating a policy and administering it. Where a given mode of transport has a clear-cut cost advantage (which, to be effective, is reflected in rates) over all other modes in the movement of certain commodities, and conditions occur which limit the number of firms, the central problem is the public regulation of the firms in that mode to provide "reasonable" rates. Public policy in that case has the task of deciding, through applying standards of reasonableness, what the rates must be. This is public utility regulation and the theory and practice of it is sufficiently developed to need no treatment in this Report.

The instances of clear-cut, over-all cost advantage pertaining to a given mode of transportation are becoming fewer. More and more, new techniques are making the movement of goods by alternate

modes possible. Each mode has a range of costs at which it can provide its particular services and, if competition were pervasive enough, these costs would parallel with fair accuracy the prices charged. But the more competition is limited, the more the pricing of any individual movement will tend to be opportunistic, unrelated to the costs properly associated with the service performed. This, as a matter of course, finds its effects in the misallocation of resources in transportation, and distorts to a greater or lesser degree resource allocation in the rest of the community.

Public action, therefore, in developing a National Transportation Policy, must seek to encourage competitive forces where the structure of the industries permits pervasive and effective competition to operate, and to regulate where it does not. In practice this amounts to developing agencies of regulation which recognize that freedom of pricing will bring efficiencies in those sectors of the transportation industry where the firms can be numerous and achieve satisfactory economies with commitments of capital small in relation to the total market. Trucking is the obvious example. Regulation in this situation should be firm, uniform, clearly stated and adequately enforced, confined to maintaining standards of safety and performance. This applies particularly in Canada at the provincial level where co-ordination needs to be developed to achieve uniform standards and to be able to resist pressures, in the interests of those firms already established, for stricter control of entry. Stability within the industry, as defined by some proposals, is not synonymous with the provision of service at lowest real cost to the community.

For those parts of the industry where efficiencies in operation are obtainable only by very large capital commitments, the number of firms will be small in relation to the total market. The railways are the classic case in point. Here competition cannot be totally relied upon to regulate price in the interest of lowest real cost. It is here that public action must acknowledge the necessity of control comparable to any utility regulation but with one important complication. These large firms, for a large and growing portion of their business, are within a cost range which is competitive with the trucking industry. Thus the unique situation exists, and will likely persist, of a few large railway companies being the sole practical movers of a few types of commodities important to Canadian development, but competitive with one another and with a lively and growing host of trucking firms offering specialized local and long-distance road hauling. Therefore, the development of a National Transportation Policy must on one hand attempt to exercise limits on individual rates where evidence of monopoly exists. On the other hand a consistent National Transportation Policy must do nothing to inhibit the growing free play of competition, nor cushion the rough blows of competition in that segment of the whole transportation industry where a large number of firms will bring efficiency and flexibility.

Fortunately, this apparent dilemma can, we believe, be resolved by policies which are adapted to the present transportation environment and acceptable within the Canadian constitutional framework.

The policy which we believe should be adopted will not guarantee longevity to any specific firm offering a transportation service nor guarantee the long-run continuity to any given mode of transport as we now know it. The facts of competition and the national demands for efficiency eliminate such guarantees. The policy should provide a climate in which any firm providing transportation by means of a mode, or modes, shall have the opportunity to reap the rewards of flexibility and efficiency or take the consequences of rigidity and inefficiency. We conclude, therefore, that efficient transportation should be the objective and measure of public responsibility for the nation's transportation system.

### Basis for Regulatory Control

Whatever may have been the rationale behind transportation pricing policies in the past, the evidence set before this Commission, and the analysis we developed in arriving at conclusions, make clear that the emergence of competition inevitably throws the ratemaking into sharper contact with the whole problem of costs of movement. Whether it is the costs associated with a particular movement by his own firm, or the costs of movement by a competitor, the orientation is evident. He must be in a position, before he can attempt to place an evaluation upon the quality of service of the movement by his firm, to know the minimum rate, determined by costs, below which he cannot go. And the relevant costs are determined in considerable part by the volume, speed and periodicity requirements of the traffic. The development of rapid and accurate costing methods is essential to all modes competing for traffic.

As the range and intensity of competition spreads, and individual *ad hoc* rate adjustments become less and less useful in maintaining or capturing traffic, broad and general revisions of the traditional rate structures are needed to bring them more in line with cost patterns. Only thus will each mode be in a sufficiently competent position to move the traffic most suitable to it.

The development of costing techniques is particularly vital for railways, and we have been impressed by the degree of sophistication already displayed. The submissions made to this Commission on the costs associated with the movement of grain and grain products from Western Canada to export positions is evidence that the science and art of cost finding have made significant strides. The determination of the degree of competence in costing principles and practice was the reason why so much time was taken up dealing with the cost studies on the movement of grain. It was an excellent test case. This knowledge will, under the pressure of competition, be continually refined and improved with the expectation of increased accuracy in the results. However, we wish to acknowledge that several of the most important decisions respecting any costing operation are matters of judgement and not of technique, and are likely to remain so.

The unique position occupied by railways in the total transport picture makes railway costing of significant importance to the regulatory authority, the Board of Transport Commissioners for Canada. The same conclusion may be drawn for any mode of transport where the capital investment of the firm is significant in relation to the total volume of traffic moved. Where this phenomenon exists, regulation of rates, particularly minimum and maximum rates, becomes essential. The evidence in support of this conclusion will be presented in the appropriate chapters to follow. It is sufficient to state here that, for these reasons, the development of adequate and accurate cost and traffic data becomes of vital interest to all rate regulatory authorities. At the moment, we do not have, in sufficient detail for all modes, the total volume of traffic handled or its composition or the nature of movements or the significant reasons for the choice of a given type of movement. Without such information, any adequately broad and composite picture is unavailable to the regulatory authorities which would enable them to judge specific regulatory decisions in perspective.

Even more serious, those responsible for policies of public investment in transportation are unable now to judge accurately the influence of their decisions upon the mode concerned or on other modes. No accurate universal assessment of cost measured against benefit can possibly be made without the necessary statistical series. A serious aspect of this limitation has been the probable effects of public investment on those modes most completely dependent upon private sources for capital funds. The end result of the lack of sufficient data has been the inability to assess proper user charges for the use of public investment in transport, or to be able to use the instrument of the user charge to direct activity toward that mode making the most efficient use of resources.

Without accurate and sufficient statistical evidence wasteful public expenditure is a constant probability. If the objective of the National Transportation Policy is the creation of an efficient transportation system this involves the encouragement of the various modes, separately or in combination, to the extent of their economic capabilities. This involves, without question, cost and traffic compilations by the carriers and inevitably by the regulatory and the policy-making authorities. Accurate collection of such data and co-operative development of costing techniques are basic to an effective transportation policy and practice. Specific recommendations to fill the gaps in this field appear in Chapter 6.

## INCIDENCE OF INVESTMENT PATTERNS ON TRANSPORTATION COMPETITION

Competition between various modes of transportation for the opportunity of carrying goods for a price is a complex phenomenon which defies a simple explanation. Its nature can be partially described in terms of orthodox economics, that is, by the analysis appropriate to conditions of imperfect competition on both the demand and supply side. In this respect, certain characteristics of transport competition are of primary significance. One of these primary characteristics is found in the great differences in investment patterns between the various modes of carriage. It is with this characteristic that the analysis of this chapter deals. In our view, an appreciation of these differences in investment patterns is essential if proper guidance is to be given to policy in the provision of public investment in transportation.

The history of Canada is, of course, replete with public participation in the provision of transportation investment at all levels of government. Such participation began with the earliest provision of roads. It developed in sophistication with the extension of massive public assistance into the St. Lawrence canals, navigation and terminal facilities for ships and aircraft, land and money grants to railways, provincial and federal highway construction and, more recently, pipeline loans.<sup>3</sup> Nevertheless, our investigations have revealed surprisingly little evidence of a consistent and considered economic approach to this allocation of public assistance among these various modes. This may be explained, at least in part, by the fact that only in recent years have these forms of assistance provided facilities for modes of transport which were to a significant degree competitive. Moreover, it was not until the emergence of a vigorous trucking industry in competition with the more traditional railway that the necessity for careful consideration of the relative impact of public investment in favour of one mode of transport as against another began to become apparent. It is our intention in this chapter to illustrate the development of this particular phenomenon as it is related to the growth of competition between these two modes.

The investigations of this Commission lead us to affirm that two features of the competitive conditions which presently exist between trucks and railways have had a major influence on the ability of the two modes to compete. First, the character of investment in the motor transport industry has given a degree of flexibility of operation to trucking firms which cannot be achieved by the railway industry. Second, the nature of pricing for service, commonly called the rate structure, is still based largely upon a classification structure which the railways evolved when they held a virtual monopoly of the overland transportation market. The first of these, investment, will be treated in this chapter; the second, pricing, in the two chapters that follow.

Differences in the investment pattern between companies engaged in hauling by rail and those engaged in hauling by road, reflect both the nature of public assistance and the type of ownership and responsibility which attach to each mode of transport. The chief difference between railways and most other modes is that the greatest proportion of the roadbed is the property, and

<sup>3</sup> See Chapter 7 of this volume for a more detailed discussion of public assistance to transportation.

the responsibility, of the railway company. Companies providing transport by pipelines are the other significant bearers of this ownership pattern.<sup>4</sup>

From the nature of the investment pattern in railway plant and equipment, it is easy to demonstrate that railways were built to operate for a long period of time. To lay a roadbed and rails, to build locomotives and rolling stock and all the associated stations and shops of long life expectancy is to undertake a large expenditure which can only be recovered over a long period of time. Furthermore, the size of the minimal amount of investment is so large that railway plant is almost inevitably characterized from the outset by excess capacity. In economic terms this means that the investment tends to be undertaken in fairly large and indivisible units. These conditions of investment necessarily involve an expectation that the amount of traffic available will grow. In other words, the nature of the investment and expectation is such that as traffic increases the railway should become more and more profitable. Having undertaken heavy fixed investment, a return from the investment is made easier to recover as units of traffic carried increase. However, once committed to investment in roadbed, stations and rolling stock the railway may not readily escape these associated investment costs when traffic either fails to materialize or declines. Some costs are variable because they can be avoided by not running trains. But a large proportion of railway costs must be considered as fixed since they cannot be escaped for a considerable period of years. Clearly, therefore, to make an investment of this nature calls for two presuppositions in the minds of the investors: (a) that there will be no serious competition to the railway in the foreseeable future, i.e., that traffic increases will accrue to the railway; and (b) that there will be no substantial increase in railway operating costs which cannot be met by general and particular rate increases, i.e., that revenue requirements will be met.

In Canada's early experience conditions for profitable commercial railway operation were not immediately present. Yet national aspirations demanded the provision of railway facilities far in advance of adequate traffic volume. In these circumstances, it was public assistance, plus the unique monopoly position of the railway as a mode, that gave the necessary confidence to the builders to expect a profitable commercial enterprise.

The proliferation of railways which ensued as a result of overoptimism about the rate and volume of traffic growth in Canada brought with it an era of competition quite unlike that faced by the railways today. Then it was competition between railway companies, that is, between carriers having the same sort of investment patterns. The result of this intra-modal competition was that by the end of World I several railroads, unsoundly financed and uneconomically built, faced ruin. Total traffic had not grown quickly enough to support all the lines, excess capacity persisted, and the burden of the investment in a number of companies grew too great for them to bear. Public action again came to the rescue and kept most of the railway plant in operation. No substantial abandonment of lines was permitted. By this policy, the nation declared its intention to pay the necessary price in public monies to keep a given measure of service in certain areas. The amalgamation of these lines into a publicly-owned company with instructions to operate in the normal commercial manner indicates an assumption at that time that total traffic eventually would grow to absorb excess capacity in the system as a whole and national purposes would be furthered through that type of cross subsidization which the rate structure permitted in order to support those segments of the system where traffic density was too light.

It transpired, by the end of World War II, that the evolution of the trucking industry was creating a competitive situation quite different from that which has just been described. Here was

<sup>4</sup> This assertion should not, of course, be taken to mean that companies engaged in other modes do not pay for the facilities they use. They may or they may not, depending upon the extent to which the "user charges" extracted from the firms cover the relevant costs of providing the facilities.

a mode of transport where the firms had no long-term commitment of investment in right of way and roadbed, or even in rolling stock built to last a long time. In economic terms the truck hauler has a large share of his costs variable with the traffic carried. The trucking firm can, for example, escape most of its "track" costs (which take the form of "user charges") in any year simply by not operating. Investment in equipment is also of shorter life. Add to these the ability to operate smaller units and there exists a medium of transport where costs move much more readily in answer to the demand for services than is possible with railways. Total capacity in the individual trucking firms and in the industry will approximate fairly readily the demands for the service. Mobility of factors is great, relative to railways. In addition, with the technology of motor trucks and trailers continuing to improve and ton-mile costs tending to decrease, more and more movements of commodities have become subject to competition by road.

Each improvement in the highway roadbed paid for by public authority, and each improvement in the efficiency of the equipment used, increased the ability of the trucking firm to expand its operations with the investment of a relatively small amount of money. The railway, on the other hand, tied to heavy investment in roadbed and rolling stock of long life expectancy was less able to shift rapidly to new and more efficient techniques of development except by large capital expenditures which called for serious evaluation before making further long-term commitments. It should, therefore, not be surprising that competition had to be real and pervasive before the necessity for large-scale technological change became evident for the railways. Moreover, the familiar pattern of large-scale investment and the previously unassailed monopoly position of the railways could be expected to engender institutional rigidities which also inhibited adjustments to the new competition.

As in any industry, the appearance of technological changes in transportation, giving rise to a new competitive mode, may in turn stimulate changes in the more traditional mode to meet it. This has certainly occurred in transportation although the process is far from complete and the eventual outcome is still to be determined. To ensure that the railways can participate in this adjustment process in a manner which reflects their appropriate position in the transportation structure is, of course, a matter of fundamental concern to this Commission. In this connection we would wish to draw particular attention to one factor which has the appearance of tipping the scale in favour of road haulage — the massive public expenditure on the highway network which, among other things, is opening opportunities to the trucking industry to extend the reach of its competition with the railways. This trend in highway building is motivated by strong and increasing public demands for roads for private vehicles, quite apart from the pressures exerted by commercial trucking interests. All levels of government are now participating in highway improvement.

Yet this expansion of highways has not been uniformly extensive in all regions of Canada and this fact explains some of the disparities that exist in freight charges among regions. In recent years it has become characteristic of Canada's transportation system that areas which are most heavily populated and industrialized have been able to afford the development of highway networks which, with the accompanying growth of motor transport, has forced the railways to lower their rates in these areas in response to competition. At the same time, those regions less generously endowed with the prerequisites for the rapid growth of a highway system have experienced not only a relative absence of competitive railway rates but also the burden of an increasing share of those railway expenses which can no longer be obtained from rail revenues in the competitive sectors.<sup>5</sup>

<sup>5</sup> Part of the solution to this problem of increasing regional inequities in transport costs, which arise from the uneven effects of competition between trucks that use a regionally-oriented highway network and a railway system designed to provide total national service, involves pricing, and this is examined in the chapters that follow. But another part of the problem is concerned with the disparities in highway development between regions. Eventually this part of the problem seems likely to require a co-ordinated federal-provincial effort to develop an integrated national highway network which could provide a basis for motor transport services in all areas of the country as adequate, relative to traffic, as that which presently serves the heavily populated and industrialized area of Central Canada. The objective would be not to add to the financial problems of the railways but rather to introduce the stimulus of competition to regions where it is comparatively weak and thus contribute towards increased efficiency, a more balanced and integrated transport system, and a general cost-orientation of transportation charges throughout the country.

In these circumstances, the extension of highways almost inevitably affects the ability of the railway as a mode of carriage to keep its share of the market. The impact becomes heavier, of course, if firms engaged in truck transport do not pay their appropriate share of the costs of the highway network. Extending this obvious principle, we would say that an adequate assessment of user charges for all modes of transport using public facilities is very much in the interests of efficiency of total transport resources.

It has been alleged before us that competition from trucks has been stimulated by the provision of a "free" roadbed, free at least to the extent that user charges (taxes, licence fees, etc.) do not fully recompense the builder of the road, and that this puts an artificial cheapness on transportation by roads. Alternatively, it has been claimed that road haulers pay in licences and taxes more than a proportionate and appropriate share for the use of the road. The proof of either contention is far from being satisfactorily demonstrated. Moreover, it is secondary in importance to the consideration upon which our conclusions rest. In our opinion, the major consideration is the responsibility of the railways to provide the long-term capital investment in roadbed and supplementary structures plus the longer life expectancy, larger cost and greater capacity of the motive power and rolling stock units rendering mobility in railway resources so difficult, which lies to a great extent at the root of the railways' competitive problem. Stating it conversely, it is the extreme mobility of resources in trucking, and the high degree of escapability of costs in trucking which, in large part, make that mode effective in competition with the rails. It is these facts which, in large degree, have only become clear in the past decade, and which to a great extent underlie the present railway problem. The evidence in proof is the railway companies' own investment in road haulage to the extent that the two major railroad companies between them constitute the largest owners of truck fleets in Canada. In a dynamic economy, where technological change is rapid, it is natural to seek investment in short-term equipment so far as is possible, and to seek it in an area where a large proportion of fixed costs are escapable by the firm, given comparable profit prospects.

Generally speaking, it is recognized that it is unwise and uneconomic for management to hold to techniques or resources in the face of new discoveries or new techniques solely because of undepreciated earlier investment. The new situation in transportation puts the concept to the test. Where irresistible public pressures for public investment in roads and highways inevitably renders incidental benefits to commercial transportation by providing roadbed on a "pay as you use" basis, it would seem unrealistic for the government to provide additional alternative rail assistance simply on the grounds that business firms engaged in the provision of transport shall be in a competitive position with one another. Only if the full benefits of competition by road were not being passed on to shippers would there be some justification for such action. But competition between firms engaged in road haulage has been such and will continue to be such that the benefits will accrue fairly rapidly to the public so long as artificial restraints on entry do not create an element of monopoly in the trucking industry.

Problems do exist, however. Manifestations of the competitive disadvantage suffered by railways because of the structure of the investment pattern were reflected in the several proposals brought before us for rectifying these disadvantages. These proposals resolve into two. One suggests that truck licence fees and taxes should be increased; the other suggests that the burden of railway investment in roadbed and track should be shouldered by government even as it is for road carriers. There are practical constitutional and operational difficulties to each, but each may be considered on principle in the first instance.

The proposal to increase present road, fuel and franchise fees to trucks rests on the premise that these are not now high enough to repay the road authorities for the use of the highway. Considering this as a possibility, increasing these user charges to the full extent proper, or

even beyond, would still permit any road hauler to escape the necessity for long-term capital commitments for the road he uses. It is this special element in the situation, plus the fact that the trucker is able to begin to operate with much smaller and less costly equipment, which gives the trucker the high relative mobility of resources which enables him to compete so effectively with the railways. These same characteristics of the investment pattern in trucking make the individual trucker subject very quickly to competition from other truckers. Increasing his fees and taxes will decrease his ability to operate, expand or contract his plant, but it will not remove from him this fundamental advantage of flexibility. This conclusion should not be taken to mean that it is not sound or wise to charge the trucking firm for the costs of the roadbed that it uses. If the efficient allocation of resources in the transportation industries is to be promoted each mode of transport ought to pay its proper costs.<sup>6</sup>

Licensing authorities throughout the nation should, we believe, review policy constantly to ensure that user charges reflect the economic and social costs of providing transportation facilities to private automobiles, trucks, planes and ships. Many of these cost items can be accurately determined; some of them will always be a matter of judgement. Particularly is this true in the estimation of indirect costs. Highway licensing, for example, often does not take adequate account of the expense necessary to regulate and control traffic, nor of the social costs of the accident rate or the inconvenience caused by traffic density, speed factors, etc. The same factors apply to other modes of transport, particularly by water and air. These costs, even though arrived at partially by estimate, are nevertheless real costs, and a failure to charge for them is to render the favoured mode artificially cheap and will distort the optimum allocation of resources between all modes of transport.<sup>7</sup>

If it is desirable that roadbed or other facilities be made available to some modes of transport by public investment at a charge less than the real cost, could the railways not be placed in an equally favourable position by lowering the roadbed costs to them? Conceivably this could be done either by lifting the burden of investment in roadbed upon which the railway company should make a return, or lifting some of the burden of maintenance costs.

These questions need to be examined in two parts: the competitive effects of relieving the railway companies of historical costs of roadbed and the competitive effects of the state providing the roadbed and levying user charges.

<sup>6</sup> One of the main conceptual difficulties in comparing truck and railway costs is the problem of rate of return on the roadbed. The user cost of the trucker would obviously have to cover an appropriate portion of the cost of building and maintaining a road. The railway earns a rate of return designed to cover the comparable costs met by truckers but in addition must attempt to get a return on the money invested. Whether this money return should be calculated on the basis of historical sunk costs or current replacement costs is irrelevant at this point. What is relevant is that the railway, under the necessity to earn a return on roadbed investment, suffers a competitive disadvantage that could be rectified only by decisions either to include in truck user costs some component for the return on the road investment, or to lift this obligation from the railways. In the interests of total efficiency in transportation comparable adjustments should be made in user charges to any mode of transport making use of facilities provided by public investment.

<sup>7</sup> Without the system of user charges a position of parity between trucks and rails, if carried to its logical conclusion, would require that the truckers build their own roads. This is to deny to public authorities the possibility of achieving more nearly maximum utilization from public investment in roads. Given historically comparable public assistance, to do so would lead to excessive investment in roads in the country, and would put the road users, both public and private, to the unnecessary expense of owning and supporting two parallel systems of identical roads, neither of which was used to capacity — a situation which is apparently forced by operating limitations or institutional rigidities in some areas upon the two major railways in Canada. By no economic test could such a highway programme be supported and naturally it was never seriously put forward to us. It is set out here to illustrate that forcing the appearance of equality of opportunity between competing modes of transport by overcoming the natural, technological or social advantages enjoyed by one in order to permit "competition" by the others is against the interests of efficiency. True economies rest on exploiting every advantage to its limits, and the incentive to that exploitation is the spur of competition. Public policy need only ensure that the advantages are real.

Analyses may be undertaken to estimate the social costs of undertaking a responsibility to provide roadbed to a mode of transport which uses it exclusively. The very fact that operational and technological factors make it necessary that railway companies have complete control of roadbed use inevitably ties to management the ultimate responsibility for determining how much track there will be, where it will go, and the utilization through pricing policy which will be made of it. Historically, the nation has also had a hand in making these decisions through various forms of control over construction, assistance in cash and land, and maximum rates. Thus the burden of responsibility for roadbed investment in Canada was never exclusively the prerogative of management. Now that portions of this large investment are in excess of efficient utilization it could be reasonably proposed that the burden of earning a return on parts of the railway roadbed systems should be partially lifted. Especially might this be argued since efficient utilization has been inhibited through the impact of competition stimulated in part by public investment programmes of assistance to other carriers. However, we have not been able to proceed that far in our recommendations. We have recommended in the first volume of our Report that the railways shall have freedom to abandon unprofitable segments and thus escape the associated costs. Where public policy requires the process of roadbed retrenchment to be gradual or where it requires the retention of unprofitable lines, we have asserted that these should neither be a burden on the railway companies nor distort cost patterns and price patterns with consequent effect upon choice in the market place and eventual misallocation of resources.

The recommendation we made respecting uneconomic branch lines in Volume I proposes a solution to only part of the problem — that of the burden associated with historical roadbed investment which is now uneconomic. No such recommendation would have been made had we been convinced that railway management was and remains solely responsible for the original investment. Had management been solely responsible it would have been consistent with the approach we have taken to leave management to reap the penalty of what technology and time proved to be an unwise investment. But railway management has never been entirely free to adjust plant and services guided only by market demand. The nature of the assistance we have suggested — that the public should pay for services rendered as long as they are rendered, whether these be branch line services, export grain or passenger services — and the attendant opportunity to escape the burdens of uneconomic investment, should enable management to adjust to the realities of the transport market today and in the future.

One of the factors which railway management must face in their planning for the future is the responsibility to earn a return on investment in roadbed, a responsibility which may not be assumed by some other modes. Provided the railway companies are not made to suffer losses on services they are obliged to perform in the national interest, the question then becomes: should public policy attempt to redress this "imbalance" by shouldering certain roadbed responsibilities? All things considered we have not and do not recommend it.

The concept of the railway roadbed is different from that of public roads. Technological and operational characteristics of the railway necessitate complete control over traffic movements. Thus responsibility for the number, size, weight, frequency and speed of trains rests with management. These require managerial decisions on levels of maintenance, types and amount of new investment, and responsibility for expansion or contraction of roadbed facilities. These, in turn, require complementary decisions on pricing policies and service standards. In short, the investment associated with roadbed and the responsibility for it is an integral part of railway operations. Consequently, provision of the roadbed by the state would seriously limit management's control over track standards. In addition, since the appropriate user charge would be the applicable maintenance costs, there would be no advantage in shifting the responsibility to the state.

There is one concomitant aspect of the different investment patterns facing management which warrants special mention. In certain sections of the nation, ownership of roadbed and right of way by some modes of transport, particularly railways and pipelines, is subject to an annual property tax assessment. This levy is treated as a source of municipal revenue, a tax on the transportation companies for ordinary fiscal purposes. To the extent that municipalities raise revenues by this means in excess of any direct expenditure by the municipality in servicing the transportation company, the property tax becomes a levy which creates a competitive disadvantage.

In contrast, other competing modes of transport pay no comparable tax. The licensing and fees levied upon transportation in payment of service received is a user charge designed to repay public authority for actual expenditure. To the extent that user charges do not contain a surcharge comparable to a positive tax contribution for the roadbed above the costs associated with the use of it, the forms of transportation paying roadbed or right of way property taxes have a competitive disadvantage.

This assertion is not to be construed to mean that all property taxes upon modes of transportation are unrealistic or unreasonable. In a free enterprise environment businesses must contribute to the upkeep of public authorities. Depots, yards, warehouses, terminals wherever used in conjunction with any mode of transport should rightly bear the usual business property tax or comparable terminal user charges. The fact that the space requirements of one mode are more extensive than another is not in itself an argument for claiming discrimination in taxation. The appropriate principles of assessment should be applied impartially in order that the true social costs of each mode of transport may be accurately reflected in their cost patterns. But where some modes of transport are called upon to pay types of taxes which others are not, a distortion in resource allocation is introduced. Due to well-established traditional patterns and the dependence of municipalities on these property taxes, there is probably no realistic expectation that these burdens will be lifted. Nevertheless, it is one of the considerations which the Transportation Advisory Council, recommended in Chapter 6, should bear in mind.

The solution of the problem of securing an optimum allocation of resources in each mode of transport will be achieved, not by lifting the burden of roadbed investment over which railways must perforce have exclusive jurisdiction, but by levying appropriate charges, including return on investment, on all other modes of transport for roadway, navigational or terminal facilities provided, sufficient to assure that each bears its appropriate costs of operation.

The recommendation we have made respecting the lifting of burdens from the railways for uneconomic branch line operation on those lines the railways would abandon under normal commercial criteria we do not see as a contradiction of this analysis. That recommendation was predicated on the fact that errors of forecasting were made about such things as the growth of traffic, the growth of competition and its effect on branch line requirements of the nation. With the benefit of hindsight we see that the investment in branch lines was excessive. Still, we cannot deny that the railways in large measure paced the development and settlement of the nation. Had public and private investment in railways been more cautious, the rate of national growth would have been less. Furthermore, we must recognize that the state played an influential role in determining the pattern of branch lines in the days when the railways had a functional monopoly of overland transport. Now that the functional monopoly has largely ended, our recommendation in the first volume of this Report was that the state should relieve the railways of operational disadvantages on lines which they would willingly abandon. We make no inference that the railways should be reimbursed for the capital expenditure on these lines.

The principles stated above should not be extended to infer that we believe the role of the railway is ended in Canada. It is our conviction that, bearing full costs of investment and operation,

there is a very large volume of traffic which a railway can haul at an acceptable service level, more cheaply and expeditiously, at a price which will capture the traffic and render the operation remunerative. This is not to say, however, that it will be the railway in its traditional form and function which will render this service. Once adjustments have been made for competitive factors now existing, with assistance to minimize the social and property dislocation, and given the attitude and powers of flexibility to meet new situations, then the railway will assume the place it can most effectively fill by economic and business tests. Whether its future is, from that point on, upward or downward will depend upon its ability to remain competitive. Certain recommendations which we have already made as a result of our investigations will, we believe, over an interim period of time, assist the railways to rationalize and adjust plant and operations and so place them in a position from which to render the services they can economically perform.

To sum up, we wish to state that it is our conviction that a considerable degree of competition would exist between carriage by road and by rail because of the different patterns of investment in each mode and because of the ways in which the costs of investment must be borne or may be escaped by each. Certain conclusions logically follow from this.

1. The objective of efficiency in the provision of transport services in the nation demands that each mode shall operate so as to bear the real costs of the resources used. To the extent that law and public policy force a mode to utilize its resources in the provision of service, adequate remuneration should be made. To the extent that public policy provides resources in the form of facilities to any mode, adequate charges should be levied to cover the associated real costs.
2. User charges for the use of facilities provided by public investment may frequently fall short in covering user costs plus a market rate of return on the investment. On the other hand, those modes which are most fully responsible for the costs of providing their facilities are forced to attempt to achieve a normal or market rate of return on the whole investment. A competitive disadvantage may result. In some instances roadbed property taxes aggravate this handicap.
3. For modes paying user charges for the use of fixed investment in roadbed or terminal facilities, changes in traffic patterns permit changes in the scale of operation and permit the firm to arrive at new decisions knowing that most of their costs are variable in the extremely short run. Public policy should permit this flexibility.
4. Some modes achieve economies of scale only at units and levels of output larger than others. Characteristically this introduces rigidities into the type and level of service that can be offered. In an economy which is maturing, with relatively less and less emphasis placed upon primary production, those modes with economies of large scale may be forced by competition to specialize in those movements where their greatest economies lie. Public policy must recognize that this will call for periodic re-evaluation of investment in that mode to avoid obstructing desirable readjustments.
5. It is also likely that the business corporations who must face such specialization and possible retrenchment will seek to diversify by branching into investment in other modes. Railway company purchase of truck lines is the obvious example. We conclude that, in the environment of public investment in road building which has been developing at an increasing rate, it is normal for management in transportation to attempt to invest in resources where the larger proportion of costs are escapable. Railway companies are transportation entrepreneurs. As such, if their considered policy is to transfer resources and initiative to road hauling or to a combination of road and rail, there is no good reason why it should be inhibited by the National Transportation Policy. Arbitrary attempts to limit the possible growth of economic power by limiting conditions of ownership in the

various modes we regard as unwise, for reasons set out in Chapter 3. Such limitations can inhibit the withdrawal of investment from the less efficient mode, introduce rigidities into transport investment and delay the integration necessary for movements by two or more modes when efficiency calls for it.

6. Responsibility for and control of roadbed by the railways is advantageous, particularly on railway systems as large as those existing in Canada. Plans for maintenance of the track may vary considerably, depending on traffic, thus enabling the costs associated with ownership of the roadbed to become in some degree variable. Modes of transport using public facilities have little control over the level of roadbed maintenance or operating conditions and are subject to a certain degree of arbitrary restriction on loading limits. Keeping in mind the small-unit nature of these modes of transport, particularly trucks and aircraft, these restraints, while sometimes frustrating, are tolerable. On the other hand, keeping in mind the tremendous advantages which the railway has in achieving economies of operation with heavy loads on long distances, the freedom to control traffic and operating conditions and to adjust maintenance levels cannot be underestimated. Attainment of the full economies of scale demand complete control over roadbed use.

It is for conditions such as these, inevitably associated with the ownership of various competing modes of transport, which lead us to suggest that very little will be gained for the common good by artificially restricting the flexibility of the railways' competitors through excessive and restrictive operating and user charges, nor will there be any concomitant public benefit through artificially increasing the capacity of railways to carry traffic by lifting the burden of responsibility from management for total investment. If user charges are at a proper level to other modes, no artificial competitive disadvantage attends those who are responsible for their own roadbed. The differences in patterns of investment mean, to the private (and public) entrepreneur, that all modes of transport are not equally competitive for similar standards of service, and no amount of artificial juggling with public assistance can place the various modes on an identically competitive plateau. For equal service, ton-mile costs will not be equal. Efficiency demands that public policy should recognize the disparate nature of the various modes and shape itself to allow them to compete where they can in terms of service and prices which reflect their competitive differences.

A reasonable approach for public policy to assume is one of encouraging competition within the road haulage industry by easy entry and minimum legal and accounting costs to the carrier. The very nature of carrier investment patterns in the road haulage industry is such that competition very quickly will spring up without any help from public policy. Should entrance by new firms be unduly restricted or capacity kept below requirements the need will be filled by the emergence of private carriage.

Whenever there is evidence that road usage by commercial vehicles paying fully assessed user charges has reached the socially tolerable limits of density, an assessment should be made of the alternative costs of providing additional road surface or roadbed assistance to the railways. It becomes quickly evident that such an assessment cannot be made rationally in the short term, for once railway facilities have been withdrawn between two points, the railway no longer exists as a practical alternative to road haulage.

The problems associated with public investment in transportation facilities for all modes are not identical to those related to road and rail. But they are broadly similar. Responsible government actions respecting the provision of transportation facilities become interdependent in an increasing degree as the modes become more competitive. The speed with which they do become competitive may depend as much or more on the amount and direction of public investment in facilities as upon any other factor. The pressures by special interest groups for public investment are thus encouraged.

It is also evident within our constitutional limits that jurisdictional problems exist between various modes. The state, at all levels of government, and particularly at the federal level, now bears and will bear increasing responsibility for the pervasiveness of competition in transportation. If the objectives of National Transportation Policy are to be achieved, if investment is to be placed where it is most urgently required for development reasons and if over-capacity is to be avoided, some continuing and careful analysis must be made of all aspects of public investment in transportation. Without it pressures from special interests cannot be assessed in the light of national needs.

Respecting measures to meet and deal with this growing responsibility which governments at all levels have assumed in providing investment in transportation facilities, we will recommend in detail in Chapter 6 of this volume of our Report. There, following the examination of other important problems associated with the creation and sustenance of a National Transportation Policy, our conclusions respecting public investment in transportation will have added perspective.

## PRICING UNDER CONDITIONS OF SATISFACTORY COMPETITION

The objectives of National Transportation Policy can be partially achieved through the forces of competition. Where it does exist, it will tend to move prices towards conformity with costs of providing the service, and thereby lead to the optimum amount of resources of men and capital being devoted to each mode of transport. Under these competitive conditions, the firms engaged in transportation, whether they confine service to one mode or offer service in more than one, will earn satisfactory returns so long as they operate efficiently, adjust plant and investment to the market demands for their service, and price the service they offer in conformity with their costs of providing it.

Inter-firm and inter-mode competition does not of course imply that the rates charged any individual shipper will conform precisely to the costs of providing the service which he receives. In the first place there are all of the usual market imperfections and lack of precise knowledge. Furthermore, we are prepared to acknowledge that differential pricing in a limited manner will persist even in an environment of satisfactory competition and that some differential pricing can be entirely justified and does not cause significant distortions in the use of resources in general.

In this chapter we analyse the extent to which competition can be relied upon to bring about efficiency in transportation and can thereby reduce to a minimum the controls necessary within the widening range where competition is effective. To do so, it is first necessary to present an historical analysis of ratemaking and its evolution from a situation of near-monopoly to the present stage of mixed competition.

### Traditional Railway Pricing

In the earliest days of the railways, freight rates were not based on well-defined principles. Individual rates were sometimes put into effect on an experimental basis and at times special agreements were worked out between carriers and shippers. The innovation of rail transport in Canada was so superior to any existing medium of transportation that little or no complaint was raised for the first twenty-five years of railway operations. Since neither the shippers nor the government felt inclined to question the rate structure the railways were under no compulsion to provide a theoretical justification for the structure of rates in force.

With the publication of the first classification of commodities in 1874 by the Grand Trunk Railway, a somewhat more rational approach emerged to supplement the test of experience in railway pricing. In this first classification, commodities were grouped in four classes, with the fourth class serving as a basis for the determination of prices in other classes. Special ratings for agricultural commodities and lumber were attached to the classification.

The main principle which seemed to be behind the grouping of the commodities in the initial freight rates classification was "charging what the traffic will bear": an adaptation to railway transportation of a principle already well known in water transportation. The Canadian Freight Classification made effective in Ontario and Quebec in 1884 was also based on an "ability to pay"

principle. But the Canadian rate structure incorporated, in addition, one of the first attempts at geographical equalization of rates: the high rates charged on some rail lines or commodity lines were averaged with the extremely low rates on others.<sup>8</sup>

In addition to such principles as ability to pay and geographical equalization, other considerations left their mark on the Canadian rate structure. The requirements of national development led the railways, sometimes on the intervention of government, to grant low rates to raw materials and other low-valued commodities. From this it can be seen that our rate structure took shape on the basis of *ad hoc* economic and political considerations without any careful analysis of over-all purpose or direction.

As rating practices became more and more the subject of complaint, attempts were made to develop a set of rational principles. The principle of "charging what the traffic will bear" or "not charging what the traffic will not bear" was based on the assumption that each commodity susceptible of being transported had a "movement value" ranging between out-of-pocket costs of the services, the amount below which a carrier could not accept in his pricing of a service if he was to remain in business, and a maximum above which the price of the service to the shipper could not go if movement was to take place.

The "movement value" was sometimes identified as the incremental value in the selling price caused by transportation. It was believed to be affected to some extent by the distance, the use of the commodity, the quality of service, but principally the value of the commodity. The benefits the shippers of commodities were assumed to gain from railway services were tested against a charge for those services. According to present day theory the idea of a "movement value" may not appear to be too sophisticated but it should be remembered that experimental adjustments were made which permitted railways to discover what the shippers could afford to pay.

In general it seemed to be observed that high-valued commodities were able to pay high tolls, which were well above the cost of performing the services. On the other hand, the fact that railways were a declining cost industry, and the fact that they had high fixed costs which did not vary with volume, put pressure on the railways to increase their volume of traffic by granting lower prices to the traffic most susceptible to expansion. This resulted in a wide variety and number of rates covering most of the commodities susceptible to movement.

High-valued commodities or commodities which were considered to have a high movement value were classed together in the grouping of articles carried by the railways and the prices charged for the services became known as class rates. Prices for other lower valued commodities were established in relation to class rates, but at a much lower level; they are known today as commodity non-competitive rates. Special reductions were granted to meet water transportation competition, most of which was seasonal. These reductions resulted in what has become known as competitive rates.

The traditional theory of railway pricing was a sophisticated and complex example of price differentiation. Commodities of high value were charged a price high enough to compensate for the low prices charged to low-value commodities. With revenue requirements in mind, rates were set to average out the differences in cost of the service between easily accessible, more settled regions and those more remote. And tapering of rates with distance resulted in some assistance to long-haul movements.

<sup>8</sup> Henry, R.A.C., and Associates, *Railway Freight Rates in Canada*, Royal Commission on Dominion-Provincial Relations, Ottawa, 1939, p. 163.

While the costs of performing the services were an important factor in the over-all consideration of the profitability of the companies, they were never an important element in the pricing of railway services for each commodity. The accepted philosophy was that low-valued commodities would not move except at a price which was little above the out-of-pocket costs of performing the services and that the assistance required for such traffic could be contributed, without harm, by high-valued commodities. This ruled out the necessity of a pricing system based entirely on costs. Added to this was the difficulty of separating the joint and common railway costs incurred in performing the services and the lack of mathematical tools to calculate the costs of a particular movement.

Differential pricing was possible and quite practicable within a monopoly environment. Distortions from any theoretical ideal which might occur in resource allocation were simply not important under the overriding national concern for resource development and for the provision of an improved transportation system. The gains to the nation resulting from the development of primary products far outweighed any refined consideration of resource allocation. Furthermore, national development through customs tariffs, and by land grants and other assistance to settlers, made a close calculation of relative resource allocation pointless. To a very large extent the acceptance of differential pricing fitted the developmental aims of the nation.

### The Impact of Competition

The virtual monopoly which the railways enjoyed in Canada permitted them, and the shippers as well, to benefit effectively from such differentiation until new media of transportation offered substitute services for the movement of new commodities or of the commodities ordinarily carried by rail. The new competitive environment brought about a breakdown of the railway monopoly in transportation services and a fundamental change in the railway pricing system. For an increasing sector of transportation services, competition meant more services and lower tolls from a pricing system beginning to reflect cost differences between competing carriers.

A study of the traffic moved by the principal media of transportation reveals that the changes which have taken place because of the new competitive environment are recent phenomena. They have, moreover, far reaching implications with regard to the allocation of transportation resources and the pricing of all transportation services. Competition implies a more cost-based pricing practice for particular movements and means a better allocation of transportation resources as the price charged tends towards the costs of movement.

Competition from motor transportation, the main medium in competition with the railways, began to be felt by the railways in the fourth decade of the present century. Statistics on the tonnage moved by motor transportation are not available for the entire period. However, even by 1939, the expansion of the facilities in motor transportation and the competition within the motor transportation industry, according to the findings of a study undertaken for the Royal Commission on Dominion-Provincial Relations, had:

"resulted in diverting a substantial volume of merchandise traffic in particular from the railways.

"In the endeavour to stop this diversion the railways in recent years have made many reductions in their rates for this class of traffic, they have improved their service and they have relaxed their packing requirements and lowered their minimum carload weights. In both Eastern and Western Canada the railways have established 'Pick-up and Delivery' rates under which the expense of collecting the shipment and delivering it at destination is assumed

by the railways at practically the former rail transportation charge. As a consequence nearly all of the less carload tonnage in Eastern Canada (bounded by Quebec in the east, and Windsor, Sault Ste. Marie and Sudbury in the west) is now moved under such rates."<sup>9</sup>

In 1938, the railways requested and obtained from Parliament special legislation affecting the pricing of services for shipments of commodities under contract. The new device was known as an agreed charge. The railways based their request on the economies which could be shared with the shippers if a larger percentage of shipments were secured to the railways the year round. However, agreed charges were not used extensively until the 1950's.

World War II imposed heavy restrictions on motor transportation. Statistics recently made available,<sup>10</sup> however, show that motor transportation carried a substantial tonnage of the freight traffic during the war period. In 1942, the ton-miles performed in intercity traffic by motor transportation amounted to 2,424 million compared to 56,154 million for the railways. For the same year, the Dominion Bureau of Statistics estimated the freight handled in intercity traffic at 130 million tons for motor transportation and at 155 million tons for the railways. Similar statistics for the year 1947 estimated the share of motor transportation at 161 million tons compared to 175 million tons for the railways.<sup>11</sup> Soon after the war motor transportation gained great vigour through technological changes in the efficiency of the equipment and improved highways, which extended the range of operations.

In 1949, the effects of motor transportation on railway traffic were assessed again before a Royal Commission on Transportation. It was admitted that motor transportation was attracting high-valued traffic away from the railways, where rates ranged between three cents and ten cents a ton-mile. Motor transportation carriers were recognized to be economic carriers over the short haul. The Railway Association of Canada claimed before that Royal Commission on Transportation that the obligation, in the national interest, to subsidize low-valued traffic from the revenue on high-valued traffic did not permit free adjustments in the pricing system in order to cope with the situation.<sup>12</sup> High rates could not be reduced without increasing other rates, and those increases implied a reduction in traffic.

Nevertheless, while the railways considered that traffic had been lost to motor transportation and that revenue had been kept down (by \$50 million a year)<sup>13</sup> through rate reductions to hold other competitive traffic to the rails, there seemed to be some doubt that motor transportation was gaining an increasing percentage of the traffic moved in Canada.

Railway traffic had increased substantially from 1938 to 1948. The intercity ton-miles performed by the railways, which represented 54.7 per cent of the total in 1938, accounted for 70.3 per cent of the total in 1948. The comparable figures for motor transportation were 3.1 per cent in 1938 and 6.2 per cent in 1948.<sup>14</sup>

<sup>9</sup> Henry, R.A.C., and Associates, *Railway Freight Rates in Canada*, Royal Commission on Dominion-Provincial Relations, Ottawa, 1939, p. 163.

<sup>10</sup> DBS *Daily Bulletin*, May 17, 1960.

<sup>11</sup> A simple comparison of these statistics illustrates the nature of the service performed by the trucking industry: they provided a significant amount of short-haul transport service.

<sup>12</sup> Royal Commission on Transportation, *Evidence Heard on November 18, 1949*, Ottawa, Vol. 48, p. 9128.

<sup>13</sup> *Ibid.*, p. 9125.

<sup>14</sup> DBS *Daily Bulletin*, May 17, 1960. Ton-miles performed by water carriers amounted to 20,688 million in 1938, or 42.2 per cent of the total, and to 19,782 million in 1948, or 23.5 per cent of the total, which indicates the relative decline in its importance.

As indicated by the Dominion Bureau of Statistics estimates on freight handled in intercity traffic by motor transportation, there is no doubt that truckers and the shipping public in general were taking advantage on a large scale of a medium of transportation which not only offered advantages from the point of view of convenience and flexibility but reduced rates as well. The railway pricing system was presumably considered by the railways as partly inflexible because of the need to maintain cross subsidization of traffic, but still adequate to ensure the retention of a traffic volume sufficiently above the level of the late thirties to meet revenue requirements.

The Royal Commission on Transportation, 1949, to 1951, whose main concern was with complaints of regional inequities, recommended a substantial change in the foundation of the rate structure, principally the establishment of a uniform equalized class rate scale and uniform equalized commodity mileage scales throughout Canada. The Commission stated in its Report that the means of achieving the change:

“point to a new departure in class rates, and commodity mileage rates, and eventually, in so far as practicable, in special or specific rates for the Canadian portion of the North American continent. It appears that Canada has reached a stage in its development when former methods of making regional rates must give way to a uniform rate structure that, as far as may be possible, will treat all citizens, localities, districts and regions alike”.<sup>15</sup>

Parliament, also in response to regional complaints, had already directed the Board of Transport Commissioners by Order in Council P.C. 1487, dated April 7, 1948, to investigate the rate structure of railways. On December 21, 1951, Parliament enacted in part the recommendations of the Royal Commission now contained in Section 336 of the Railway Act, which determined uniform class and commodity rate scales.

The differences which existed in the freight rates between Eastern Canada and Western Canada prior to the end of World War II, had been attributed to “different circumstances and conditions”. Following the first freight rate increase granted after the war, strong objections were raised by shippers about the increased disparity between eastern and western rates. This led to the policy recommendation of equality in the rate structure, “so far as reasonably possible”.

The Board of Transport Commissioners considered equalization as a “general overhauling” of the freight rate structure.

The traffic moving under class and commodity rates according to the four-day sample of the Waybill Analysis for 1949 accounted for 74 per cent of the railway revenue. The traffic under class rates, while representing a small percentage of the tonnage, accounted for 20 per cent of the total revenue, and, the traffic moving under non-competitive commodity rates, 54 per cent. Since many commodity non-competitive rates were considered to be based upon class rates, the Board proceeded first with the equalization of class rates, the foundation of the rate structure, to be followed later by the equalization of commodity rates.

The Board’s Judgment of December 12, 1952, preliminary to the application of the amendment of the Railway Act with regard to equalization, stated that:

“the national freight rates policy calls for equality of tolls as therein provided even although the circumstances and conditions (for example, costs of railway operation, density of traffic,) are not substantially similar”.<sup>16</sup>

<sup>15</sup> *Report of the Royal Commission on Transportation*, 1951, King’s Printer, Ottawa, p. 127.

<sup>16</sup> B.T.C., Judgment and Order, *Equalization of Freight Rates*, Queen’s Printer, Ottawa, 1953, p. 7.

The new approach emphasized the disregard of the cost of service principle in the pricing of railway services and reflected the thinking that railway rates could be made independently of competition.

Before the promulgation of the order for equalization of class rates in 1955, the four-day sample of the Waybill Analysis for the years 1949, 1951, 1952 and 1953 revealed important changes in railway traffic which affected the rates scales to be prescribed. A considerable decline occurred in the tonnage moved under class rated traffic from 1949 to 1953 and under commodity traffic from 1951 to 1953. On the other hand, the tonnage moved under agreed charges increased steadily from 1949 to 1953 and the tonnage moved under competitive rates was well above the 1949 level in 1953.

From the above statistics the Board concluded that a revolution in the freight rate structure was occurring:

"It appears abundantly evident that it is no longer possible to maintain a railway rate structure based on the principle of monopoly, because the shipper of high-valued goods, such as class traffic, can now provide his own transportation, or hire someone else to provide it, without using the railway at all, and therefore avoid paying the charges on remunerative traffic which the railway needs to offset the low rates on raw materials and other low-valued articles."<sup>17</sup>

To ensure that the traffic would "move freely" because of the new competitive environment, the Board prescribed lower rate scales for equalized class rates than those proposed by the railways "to move the traffic" and to produce the required revenues. The two main standards of the Board were:

- "(1) not increasing the class rates for the relatively short hauls any more than is absolutely necessary to achieve equalization; and
- "(2) not reducing, any more than is necessary to remove irregularities, the rates on long-haul traffic, which the railways are not in so much danger of losing."<sup>18</sup>

The new classification provided for the regrouping of articles which were formerly classified too low or too high, considering their current value, and the introduction of new articles. The equalization of class rates was made effective March 1, 1955.

Since 1955 a limited number of commodity rate scales have been equalized. The main difficulty encountered by the Board was the lack of uniformity in commodity rates. The Board found that commodity rates had been established less in relation to class rates than to "circumstances peculiar to each commodity and the territory in which they apply."<sup>19</sup>

<sup>17</sup> B.T.C., *Equalization Class Rate Scale*, Queen's Printer, Ottawa, issued February 28, 1955, p. 47.

<sup>18</sup> *Ibid.*

<sup>19</sup> B.T.C., *Further Report on The Equalization of Freight Rates*, Queen's Printer, Ottawa, December 22, 1958, p. 8

This policy of equalization which was adopted as a result of the investigations of a decade ago has been frustrated by the growth of competitive forces. Events have confirmed the ineffectiveness of equalization in a competitive environment, as was emphasized by Professor Innis in 1951.<sup>20</sup>

A study of the Waybill Analysis (1 per cent sample) for the years 1954 to 1959 indicates the profound change which is occurring in the transportation industry and the shift of traffic between modes of carriage. First, it is noticeable, from Table I, that traffic moving under class rates had relative and absolute increases for one year but has not retained its importance; the tonnage moved under class rates accounted for 2.2 per cent of the total in 1954 and was down to 1.7 per cent in 1959 (compared to 5 per cent in the 1949 four-day sample Waybill Analysis). The traffic moving under commodity non-competitive rates declined steadily from 1954 to 1959, a trend which was already well under way according to the special four-day sample Waybill Analysis from 1949 to 1953.

TABLE I  
TONNAGE MOVED BY TYPE OF TRAFFIC,  
WAYBILL ANALYSES, 1954-59<sup>1</sup>

Type of Traffic	1954		1956		1957		1958		1959	
	Thou-sand tons	Per cent								
Class Rates .....	19	2.2	22	2.3	21	2.4	17	2.1	13	1.7
Commodity Non-Competitive Rates .....	500	57.1	464	47.6	398	46.1	348	43.6	346	45.8
Competitive Rates .....	161	18.4	244	25.1	220	25.5	201	25.2	179	23.6
Agreed Charges .....	53	6.0	66	6.8	72	8.4	86	10.8	100	13.2
Mixed Shipments and Multiple Rates .....	16	1.8	14	1.4	13	1.5	14	1.8	10	1.3
Sub-Total .....	749	85.5	810	83.2	724	83.9	666	83.5	648	85.6
Statutory Rates .....	127	14.5	164	16.8	139	16.1	132	16.5	109	14.4
Grand Total .....	876	100.0	974	100.0	863	100.0	798	100.0	757	100.0

<sup>1</sup> Tonnage moved in 1955 amounted to 928 thousand tons; the breakdown by type of traffic is not available for the whole year.

<sup>20</sup> Recognition of the effects of truck and water competition in the St. Lawrence region on the railway rate structure and an attempt to offset its unfortunate implications for the Western Provinces must be accompanied by an active concern in the development of a flexible rate structure through the use of maxima for the Maritimes. A rate structure which in its emphasis on the value of service principle reflects the influence of water competition and in which statutory legislation has been introduced to reinforce the general emphasis in the Crowsnest Pass rates by maintaining low rates on shipments of grain from the Prairie Provinces and in the Maritime Freight Rates Act by checking the effects of high rates on shipments of manufactured products from the Maritimes is particularly exposed to the effects of horizontal increases and of inflation which involve more rapid absolute increases in rates on manufactured products in the upper classifications than in goods in the lower classifications. The markets for products in the higher classifications shipped from the Maritimes to other parts of Canada are narrowed and the burden of rates on such products from Central and Eastern Canada to Western Canada is increased. No scheme of equalization can be devised which will overcome the effects of competition in the St. Lawrence region as reflected particularly in competitive rates. An obsession with equalization will obscure the handicaps of the Maritimes and of Western Canada and perpetuate their paralyzing effects. A reorganization of the regulatory bodies concerned with transportation will facilitate collection of vital statistical facts and offset the most serious effects of a monopoly in its control of information. In this way more precise methods can be devised to meet the problems of transportation in Canada." Memorandum on Transportation by Dr. H.A. Innis, Report of the Royal Commission on Transportation, 1951, King's Printer, Ottawa, p. 307.

Secondly, part of the decline in the traffic moving under class rates or commodity non-competitive rates was undoubtedly offset by a traffic shift to competitive rates or agreed charges. The total tonnage of traffic moving under agreed charges increased from 53,000 tons in 1954 to 100,000 tons in 1959. The tonnage moved under competitive rates was considerably above the 1954 level in 1956 (a total of 244,000 tons) but declined to 179,000 tons in 1959.

The changes in railway traffic from 1949 to 1953, it was noted above, had shown that a pricing system based on the principle of monopoly would no longer work effectively. The traffic changes from 1954 to 1959 re-emphasized that the rates (class and commodity non-competitive) which constituted the foundations of the rate structure were rapidly declining in significance. The traffic moved at these, or related, rates represented only 47 per cent of the total railway tonnage moved in 1959, compared to 68 per cent in 1951. An increasing proportion of the traffic was priced on a different basis. Cross subsidization of traffic was no longer successful because the contribution from the supporting sector was declining.

The DBS statistics on intercity ton-miles performed by carriers in Canada confirm the changes indicated by the Waybill Analysis. The railways', share of ton-miles performed was 68,430 million in 1952 and 67,957 million in 1959. For motor transportation, the ton-miles performed increased from 8,903 million in 1952 to 13,908 million in 1959. The freight handled in intercity traffic by motor transportation represented, in 1952, 226 million tons compared to 185 million tons for the railways, and by 1959, 318 million tons compared to 186 million tons for the railways.<sup>21</sup> This indicates that the railways have lost their lead to motor transportation in the movement of freight in terms of total tonnage, but had retained the large portion of long-haul, heavy-loading freight.

Under the new competitive environment more and more shipments are made by highway carriers. The traditionally high prices the railways charged for the movement of manufactured commodities gave an extraordinary headway to motor transportation. The flexibility given by the expanding network of highways and urban roads, the rapid door-to-door delivery and elimination of terminal delays and the apparently attractive rates, gave motor transportation a definite advantage over the railways on short-haul services and, with better roads and trucks, an increasing range of advantage. For the traffic where both media were competing, there is strong evidence that the prices of the services were made lower to shippers.

### **The Evolution of Pricing Practices**

Normally, where the quality of service between two media of transportation is the same, the shipments go to the carrier who offers the lowest price. It is the lower prices of motor transportation services that the railways endeavoured to meet with their competitive rates and agreed charges. Those rates, while increased somewhat over the last years, represented a turning away from the traditionally higher prices for railway services set on the movement-value of commodities.

Total tonnage of traffic grew in the period of national expansion between 1942 and 1957. Freight handled in intercity traffic increased from 337 million tons in 1942 to 643 million tons in 1957, or by 91 per cent. To carry this increase, total resources devoted to transportation increased. The railways renovated and innovated rolling stock, rights of way, motor power, signals and communications. Highways were improved and extended. Numbers and size of truck firms grew as did the efficiency of their vehicles. Private trucking expanded. The evidence of the past decade

<sup>21</sup> DBS *Daily Bulletin*, May 17, 1960, p. 3. Data for the year 1959 are estimates supplied by DBS prior to release.

adequately confirms the extensive growth of intercity highway transport and the substantial and growing competition it provides in overland transport. In consequence the attempts made by railways to hold and gain traffic have forced pricing practices to take cognizance of costs of movement to an increasing extent in both modes. Because of real efficiencies and the pressures of competitive forces, many commodity movements have already been dislodged from their traditional place in the rate structure and now take rates set more with reference to their rail costs, or the costs of competitive modes. All the evidence we have found leads us to conclude that railway management is increasingly aware of the necessity of attracting traffic under conditions of price and service in conformity with cost patterns.

The great strides made recently in the techniques applicable to the costing of rail movements give confidence and precision to the ratemakers. There is no reason to expect that these techniques will not be further refined, particularly if railway accounts are set out to aid in the process. As the prices of transportation are approaching more ideal conditions, where the price of service is determined by costs of rendering it, the implication is that the more competition prevails the better it is for the shippers and the economy in general. For the media of transportation within the new competitive environment the pricing of services on a cost-oriented basis has become inescapable.

We regard this change to a more cost conscious pricing policy in all modes of transportation as consistent with the objectives of the National Transportation Policy. Where railways have cost advantages they should carry traffic if the price discount is sufficient to overcome any service disadvantages. To the extent that government subsidies are used to keep traffic confined to rails where no such advantage exists there is misallocation of resources. If government policy, or regulation, prevents the railways from setting prices to attract traffic on the basis of these advantages there is misallocation of resources.

### Pricing and the Nature of Service Differentials

A comparison of the services between railway and motor transportation discloses many differences. The services performed differ with regard to size of load, speed, flexibility of schedule, etc. Some of the firms engaged in the transportation field are very large. Others, while not so large, require a substantial amount of capital to operate. There are also a good number of very small firms.

Motor transportation is particularly characterized by a special limitation on certain routes where a franchise is required to operate. Such limitations imply a pricing system which is not operating under conditions of optimum competition.

Under the competitive environment as we know it today, the pricing system must be considered in relation to differentiation of services. But the nature of service in transportation is such that for certain groups of traffic, the fully adequate returns to the appropriate mode for carrying them are low, as for mass transportation of commodities; for other groups, they are high. For some of them a carrier may only meet his costs; in others, he may get profits which are above normal. In the long run the carrier must cover his fully-distributed costs, but in competition he can do so only by close attention to the cost-rate ratio of individual traffic movements.

In the areas where price competition exists, reductions below fully-distributed costs require a compensation out of the surplus made from other services. With two media of transportation competing, the pricing of services of equal quality tends to be determined by each firm pricing his service as close as is necessary above the level of his out-of-pocket costs, rather than lose

the traffic to a competitor. By doing so with a given size of plant, he will minimize his losses if he retains the traffic. If the competing carrier, because of lower costs, lowers that price, he will attract the traffic; he may also choose to price his services at the level of his higher cost competitor and attempt to differentiate on the basis of quality of service. Where price competition exists, the effective level of prices for transportation services is thus set at the level of the out-of-pocket costs of the high-cost carrier, or somewhat above.

The pricing of services at the level of out-of-pocket costs might be considered to lead to cutthroat competition where the aim of a carrier is to achieve a monopoly position. This will be frustrated because of the possibility of entry of new firms in trucking or by the emergence of private motor trucks supplying service on a "non-price" basis. Shippers have found it profitable to carry their own goods in many instances. In fact, the volume of services they provide for themselves is growing steadily. The entry of private carriers in the transportation field acts as a regulator when the price of services is considered to be too high, or where the quality of service is of great importance.

### Competition and National Transportation Policy

The reality of competition in transportation calls for a new approach to regulation by both federal and provincial authorities, requiring changes in the relevant legislation. The presence of competition forces the recognition that rates for many movements will be set to meet particular competitive situations. This alone destroys any policy which attempts to ensure that shippers over any very wide area can expect to be given "equalized" rates. Equalization may be effective under conditions of monopoly but the intervention of competition renders equalization ineffective. The attempt to use equalization to ease the burden of inequities of shippers in non-competitive sectors may be expected to result in harming the shippers it was designed to help. This is because when equalization raises rates in the competitive sector and lowers them in the non-competitive sector, traffic is lost in the competitive sector while revenues are lost in the non-competitive. To recoup this double loss of revenues, rates must raised, e.g., by horizontal increases, and these rate increases must impinge most heavily on the non-competitive sector. With these progressive losses of traffic in the competitive sector and higher rates in the non-competitive, the eventual outcome tends to be greater inequities in the non-competitive sector and, where there is competition, less railway traffic and more effective truck competition. It is with these effects that Dr. H.A. Innis was concerned when he wrote that "No scheme of equalization can be devised which will overcome the effects of competition in the St. Lawrence region as reflected particularly in competitive rates. An obsession with equalization will obscure the handicaps of the Maritimes and of Western Canada and perpetuate their paralyzing effects".<sup>22</sup>

Under competitive conditions a wholesale re-evaluation of policy becomes necessary. Traditional measures to protect against "discrimination" in freight rates are in effect being set aside by competition. Preserving such measures on the statute books limits the power of railways properly to compete. In the real world of the market place shippers make the best bargain they can make, using one mode against the other and one firm against the other. Increasingly, traffic is being carried at rates designed to attract specific movements between specific points. The assumption that the railways have power to establish rates which are "just and reasonable" by criteria of the monopolistic period is erroneous. These terms lose all meaning as the criteria are eroded away by competition. To persist in a policy which enforces standards of behaviour on one mode but not on its competitors is to assume an Olympian position, with powers to determine the

<sup>22</sup> Innis, H.A., *op.cit.*, p. 307.

economic fate of industries and regions. This is no longer realistic. Where remnants of such powers still persist, we indicate in Chapter 4 (which deals with significant monopoly) the attitudes National Transportation Policy must adopt.

In conformity with the objectives of National Transportation Policy to work towards the optimum allocation of resources in transportation it is essential that regulation of railways should not inhibit the competitive ability of that mode of transport.

Regulation falls into two broad categories. One deals with conditions of operation and service. While we did not conduct any extensive study of this aspect of regulation, nor were many representations made to us concerning it, it is apparent that excessively detailed and rigid operational standards are expensive and stand in the way of technological change, thus contributing to the difficulties of meeting competition. However, competition which is met by the operation of any mode at unsafe standards is bad competition. The recommendation we make concerning this type of regulation is that the Board of Transport Commissioners should continue to be in constant consultation with the railways, both management and labour, with a view to assessing the type and extent of operational control standards, and be given the widest responsibility for the nature of specific regulation. Provincial highway regulation has an even greater obligation because it is responsible for standards on the common highways.

The other main type of regulation is that of rates. It will be necessary so far as we can see, that railways shall continue to file tariff schedules with the Board of Transport Commissioners. The freedom to change tariffs, introduce new ones, and to make specific rates to meet competition without delay must be enhanced. It is apparent to us that so long as one mode can freely quote rates at the instant of bargaining, the other is at a disadvantage not to be able to do so. Therefore, we recommend that rail rates shall be effective upon filing with the board.

Since the National Transportation Policy has as its objective the optimum utilization of resources in transportation, the position we occupy respecting rate regulation in situations of competition is determined. Where competition exists it becomes essential to allow the free choices of shippers and the market offerings of carriers, differentiated as they are in the type and quality of service they offer, to determine the allocation of resources in transportation. Those modes which gain advantages in special service, in small shipments, must be allowed to seek to gain the advantages of their specialties in the market, in competition with firms of similar type. With freedom of entry uncurtailed within strict and uniform limits of safe operating and performance standards, the prices charged will be a fair reflection of the real costs of doing business in the industry as a whole. Exceptionally efficient firms may make unusual profits, and this is to be encouraged. Inefficient firms will not last, and National Transportation Policy has no obligations in that respect.

For modes which have heavy commitments in fixed investment and gain greatest economies by volume production, every encouragement should be given by the regulatory environment for that mode to price to attract volume. Incentive rates for heavy loading, multiple carlot rates, rates tied to regularity and size of shipments, are all legitimate competitive weapons. Again, these must be reflections of the true cost conditions under which the mode operates. Rates made on that basis, a "wholesale" basis, leave to the shipper the decision whether to take advantage of these economies and adjust his productive processes to them, or to utilize a transportation service offering refinements at a higher price. It should be left with management of all firms in all modes to decide, in the light of potential traffic, whether to carry at the lowest possible price, i.e., out-of-pocket costs, or at some price which contributes to overheads sparingly or abundantly. The only limitation upon this is the necessity to limit profitability of any given movement where it occurs in the absence of satisfactory competition.

Under this philosophy of free competition the regulatory authority takes little initiative. But it must be prepared to discharge with alacrity and precision the tasks which are its responsibility. National Transportation Policy should equip the Board of Transport Commissioners with the most efficient costing section that is possible, staffed competently, and provided adequately with the necessary data from both public and private sources. Under the objectives of the National Transportation policy it is our conclusion that the regulatory powers of the nation shall continue to be charged with responsibility for the upper and lower limits of railway rating under the pertinent circumstances of each.

### **Minimum Rate Control: Railways**

Enlightened management in their own interest would not knowingly carry goods at a rate which yielded revenues below the direct out-of-pocket costs, that is, those costs directly assignable to the traffic. To persist in the practice for any considerable length of time would ruin the company. Other things being equal, the regulatory provision for minimum rate control would be redundant.

However, other things are not equal. Because of their relatively enormous size and resources, and the relative permanency of investment compared to firms engaged in other modes, the railways could create intolerable uncertainty in the trucking industry by sporadic rate wars, so that an efficient trucking industry could not persist.

Rate regulation must continue to stipulate a minimum limit.<sup>23</sup> Ideally this would be a feature of rate regulation for all modes, but administrative difficulties as well as economic reality make it less essential for the trucking industry so long as freedom of entry of new firms is permitted. A trucking firm setting rates below the direct expenses of the movement will soon be replaced. Until that happens the effect will be a transfer of income from the firm to the shipper.

With railways, extended over the nation as they are for the most part, representing large capital investment in few firms, and less involved with each other in price competition, regulation must continue to assure that no rate should ever be set below the direct costs of the movement. Where railways continue to quote identical rates between points, the permissive minimum rate must be determined by the relevant costs of the higher cost route. For the minimum to be set by the shorter or cheaper route would force one railway to offer rates below the legally stipulated minimum. With this caveat, the practice of quoting common rates by all railways should not be discouraged. Within the regulated limits of minimum and maximum rates, common or joint rates are not in themselves in restraint of competition. Depending upon the time period taken into account the minimum rate could be set at the direct out-of-pocket costs of the movement for the very short run, or, for a

<sup>23</sup> The effective existence of minimum rate control on railways will not, in itself, eliminate the possibilities of rate wars either between railways and trucks, or between trucking firms. The large firm can always destroy the small if satisfied that the fruits of victory are sufficiently sweet. This is not a phenomenon peculiar to transportation. The solution to the problem, should it arise, lies best in our view in preventing the gathering of the fruits of victory. The discussion which follows in the text concerning the time over which a minimum rate must operate holds the key so far as minimum rate regulation can be effective. More effective weapons are found in laws relating to commercial restrictive practices, which must increasingly be aware of the new position into which railways are thrown by competition. As instruments of national policy certain exemptions from these laws were necessary. The use of traditional exemptions for restrictive purposes should not be tolerated.

Part of the economic test of restraint of competition by rate practices is to determine whether the aggregate net return to be realized from the traffic moving under the new rate exceeds the net return from traffic moving under the former rate. If this is the case, the rate is not in restraint of competition. If it is not the case, further examination may be warranted. The Board of Transport Commissioners could be requested to supply the relevant information to the Department of Justice.

longer time span, at variable costs as defined for the period, or at long-run marginal costs. Insofar as the allocation of resources between modes of transport over a long period is concerned, long-run marginal costs<sup>24</sup> are unquestionably the proper minimum.

The problem which faces the regulatory authority is that of defining the time period. If railways could quote no rate below long-run marginal costs much traffic would be assigned by that action to other modes, particularly trucks. This would create excess rail capacity until railways could adjust plant and service. In practice the adjustment would not eliminate completely the capacity to carry traffic below long-run marginal cost and improve the net revenue position. Therefore, because in competition the initiative of management must be preserved, and encouraged to extract the last possible movement of beneficial traffic with the plant in existence, we do not recommend the minimum permissive rate be the long-run marginal cost. Management is well aware of what a preponderant number of rates set at direct out-of-pocket costs will do to their investment in the long run. But the short-run advantages of being able to price certain movements at the level of out-of-pocket costs must not be overlooked. It is to their advantage to secure this traffic at such a price if its characteristics offer no better possibilities. The penalties of over-indulgence in the practice for short-run advantages must remain the responsibility of management.

We adopt this approach because we recognize that railways, by the nature of the investment structure, are slower to adjust to change than the trucking industry. In periods of declining traffic and revenues, coinciding most often with cyclical recessions in the economy at large, it is beneficial that a policy of reduced rates be possible.

To the extent that rates go down to railway out-of-pocket costs and inefficient trucking competition is eliminated, the national loss is minimized because the practice puts out of action those resources which can most easily be re-created. The inherent flexibility of investment in trucking assures that it is in this mode that adjustment most easily occurs. In a period of declining economic activity and declining traffic a policy of high and rigid minimum railway rates might, it is conceded, leave trucking firms free of a degree of railway competition, yet competition between trucking firms would soon drive their rates down to the place where some firms are eliminated. During this process, one mode is prevented from resorting to the practice which another is adopting, and to that extent the freedom of choice of the shipper is limited. Even in periods of lowered economic activity, relative resource allocation is important, and competition is as worthy an instrument then as in periods of economic upswing.

In the foregoing discussion minimum rate criteria have been established on the basis that competition has grown principally between modes of carriage, ignoring for the immediate purpose the competition between firms in each mode. So far as trucking firms are involved, we have little to say. Their large numbers and relatively small investment will assure active price competition on substantially similar cost patterns.

With railways in Canada this is not the case. Two railways dominate rail transportation: one publicly-owned and charged to act on commercial principles, the other privately-owned and traditionally used as the "yardstick" road.

<sup>24</sup> Long-run marginal cost as applicable to transportation costing refers to those costs which are appropriate to assign to the provision of a given unit of additional service when rendered over a time period deemed sufficiently long for management to adjust plant and investment to the requirements of the movement. It does not refer to out-of-pocket costs as the term is generally used, and neither is it the accountants' fully-distributed historical costs. A long-run marginal cost is composed of such expenses directly traceable to the movement (out-of-pocket costs), plus an appropriation of those costs which vary with traffic but are not directly variable with any given unit of traffic (short-run marginal costs or variable costs), plus the increment necessary to reflect any impact of the traffic in question on all costs. Any revenues derived which are above the long-run marginal costs will contribute towards those fixed overheads which do not, except over an infinitely long-time period, vary with changes in traffic.

The onset of competition between modes has inevitably forced railway attention to costs of providing service. For the establishment of fair and equitable bases upon which each railway company can formulate costs, it is our firm recommendation that the capital sums advanced to the publicly-owned railway should be at rates comparably equivalent to the price of funds set by the market. To do otherwise is to set artificial advantage and disadvantage between the two railways in determining their costs.

In addition to this recommendation concerning the cost of money, we further recommend that the Board of Transport Commissioners, in every case where a minimum rate is tested, should equalize the necessary costs of capital in the rate to determine a common base upon which the minimum rate can be set.

This does not mean that costs on the two railways for the movement of a good or provision of a service will be equal. There are many other factors that have to do with the relative efficiency of a route or railway, and these may give rise to legitimate differences. Artificial pricing of capital is not a legitimate costing base.

Therefore, we conclude, and recommend, that, using the guides presented elsewhere in this Report, or other criteria, the Board of Transport Commissioners continue to determine, after due consultation and consideration, the definition of out-of-pocket costs which shall be used as a criterion of minimum railway rates, and set up within a costing section of the Board, the necessary procedures for testing the minimum, either on motion of the Board or upon application from those parties able to make representations to the Board. No rate should be suspended until the Board is satisfied it is below the legal minimum.

#### **Minimum Rate Control: Trucks**

With minimum rail rates subject to test in all instances of satisfactory competition, there is no overriding reason to give great attention to minimum rates charged by the trucking industry, because of its essentially competitive nature. If the trucking industry can haul at rates below the rail minimum, public policy should do nothing to hinder it — not indeed will enlightened railway management. Provinces which do not preserve freedom of entry, will, to the extent they restrict it, enjoy stability in the trucking industry at higher prices than otherwise, or encourage the emergence of private trucking.

What has been said for the trucking industry applies both inter-provincially and intra-provincially. To the extent that the delegation of federal control to the provinces in the interprovincial trucking leads to restriction of entry, or great differences in operating and franchise requirements, the allocative effects of competition are restricted. There is pressing need for interprovincial co-operation to standardize operational regulation, taking account fully, of course, of relative traffic densities, highway facilities, climatic differences, and other physical characteristics. So far as rate regulation is concerned, the tests developed in Chapter 4 for significant monopoly can be adapted and applied so long as monopoly may be present. But, a word of caution. The investment requirements even for efficient long-distance hauling are not large in relation to the market. Limitation of monopoly by maximum rate control interprovincially as well as intra-provincially is not the best way to achieve lower rates and better services. Above average profitability — to the degree it is won by monopoly and not earned by efficiency — will attract additional firms with additional resources to serve the market at competitive prices. In the process, under strict operational standards, there will be firms rising and declining, beginning and ending. This is the nature of the industry.

## Railway Rates and Other Assets and Income

To conclude the analysis relevant to this chapter on control of rates in a competitive environment there are two further subjects to be treated. All that has been said, and implied, on the importance and growing relevance of costs in setting rates competitively to achieve efficient transportation, is based on the assumption that the costs upon which the rates are based are the relevant costs. Anything which serves to exaggerate or disguise them will inevitably see rates constructed on a false base. In consideration of that we next deal with the problem of assets of railway companies which are not part of the cost pattern of rail operation, and particularly, rail-owned truck lines. The conclusions established here apply equally well to holding of any transportation company which are separate in purpose from the provision of transport.

The Terms of Reference guiding the investigations of this Commission specifically instruct, *inter alia*, to report upon "whether, and to what extent, the Railway Act should specify what assets and earnings of railway companies in businesses and investments other than railways should be taken into account in establishing freight rates".<sup>25</sup>

Guided by these instructions, it is possible to assess the matter in principle and in practice. Regardless of the profitability of other assets, what would be the effect of using them and the income associated with them in determining the level of rail freight rates? In practice, how much difference would it make?

Dealing with the first question, that of principle, we are guided by those objectives of efficient resource allocation which we have set out for the National Transportation Policy. This means that all modes of transport shall be given a fair chance to find their proper place within an increasingly competitive system. The use of other assets in establishing rail rates would distort the competitive environment and for this reason alone would cause us to recommend that other assets not be considered.

There are other reasons. The system of rate regulation that we have recommended, or any other, could not possibly be rational if the levels of rates fluctuated with earnings and losses of other than the rail enterprise. The consideration of other assets would distort any such cost-oriented approach to ratemaking and would consequently distort the use of transportation resources. If the realities of cost-oriented ratemaking are recognized and appropriate policy for regulation is accepted, there will be no further need for a "yardstick road", or a requirements formula, and hence no mechanism whereby the earnings and losses by non-rail enterprises could be used in determining a level of freight rates.

In elaboration, let us suppose that other assets yielded a large net return to one railway company. Suppose also that that company is then required to reduce rates. Which rates shall be reduced? If all rates are equally reduced the reduction will be smaller than selective rate reductions but the effects upon its competitive position would be similar. If the railway company is given the right to make the selection, the selective nature of the reductions will be for one purpose: the repressive effects upon the trucking industry will be immediate and profound. The effect upon other railway companies can only be surmised. If the regulatory agency makes the selection, it will have the task of determining the extent of competition and thus the allocation of resources between modes of transport, and of justifying the effect of its actions upon other railway companies. To the extent that rail rate reductions encourage the use of rail transport at less than adequate returns to railway investment, a misallocation of resources occurs and shippers are denied the possibility of rational choice between modes.

<sup>25</sup> See P.C. 1959-577, dated 13th May, 1959, included as Appendix A to Volume I of this Report.

Pursuing the analysis, let it be given that the earnings of one railway company from other assets are negative — they occasion a loss. Consistency demands that the railway company be permitted to increase rates. Which rates shall be increased? The analysis of this, and associated chapters, makes it evident that highly competitive rates cannot be raised without a loss of traffic and lowered rail earnings. The only alternative is a general permissive rate increase which will fall upon the less or non-competitive rates. The consequences of this need no further elaboration.

The third possibility is that positive net non-rail earnings shall reduce rail rates, but negative net non-rail earnings shall not raise rates. The inconsistency does not recommend itself to us on the grounds of justice.

However, there is one basis for this third possibility. It is that the non-rail assets are, at least in part, the results of national grants made to the railway companies over the years to encourage the building of the railways. If this is so, it is claimed that it is only right that the profits should be used to assist in the transport of goods in the nation — or at least in that part of the nation where the grants were made. We can find no evidence that either the donor or receiver contemplated such action. Grants were made to get the railways built. The technical superiority of the railway for land transport was so great that even relatively high rates were very attractive. Presumably the grants given were no greater than was required to get the job done.

To the extent that the grants did enable railways to be built, the railway had a new line capitalized at a lower figure than would have otherwise been necessary and an opportunity to make profits on the line. The real cost of the lines to the enterprise (if not to the nation) was lowered, and the rate structure was built from that revenue requirement. To suggest that the grants were to be used perpetually as revenue in the same fashion as revenue from rates is to suggest that the private railway builders were to act as custodians of the land grants and return to the nation, by way of the rate structure, all but an acceptable rate of return as a commission for the administration of these natural resources. This is to place the railway company in a position quite different from settlers and other persons who received land grants (including mineral rights). The nation has already instituted measures to recapture a portion of the return from such natural resources through the media of income tax and royalties. In the interests of efficient resource allocation we contend these are better and more equitable instruments of recapture than the freight rate structure, and they obviate any necessity to determine whether profitable investments originated by grant or by private capital.

Therefore, on principle, and on all the implications of the principle, and for reasons associated with the objectives of National Transportation Policy, we do not recommend that assets and earnings of railway companies in businesses and investments other than railways be taken into account in setting freight rates.

What effect, in practice, would the reverse recommendation have? To find the answer we instituted a detailed and complete study by competent consultants of the "other assets and income" of the Canadian Pacific Railway Company, including subsidiary companies, and the subsidiaries of subsidiaries, controlled by the parent company, and income from all non-rail sources, for the ten-year period 1950 to 1959. In making this study, we received from the officers of the Company information and explanations regarding the operation of all companies with which we are concerned. The examination of financial statements was supplemented by access to corporate financial data prepared for management purposes and direct reference to books and accounts of the Company as need arose.

The detailed figures on investment, depreciation and earnings of all activities, both rail and non-rail, were summarized and earnings after tax expressed as a percentage of investment in rail

and non-rail and the total business of the Company. These data are presented in Table II. It is obvious that even if the total non-rail income of the Company is taken into account with the earnings from the rail enterprise, the total earnings are certainly no more than adequate, and they may be inadequate, to sustain capital investment.

**TABLE II**  
**PER CENT RETURN ON TOTAL INVESTMENT IN CANADIAN PACIFIC**  
**PROPERTIES AND COMPANIES CLASSIFIED AS RAIL AND**  
**NON-RAIL FOR THE TEN-YEAR PERIOD 1950-59**

Year	Total earnings applicable expressed as a percentage of total investment		
	Rail	Non-rail	Total rail and non-rail
1950.....	4.28	10.64	5.35
1951.....	2.95	14.40	4.73
1952.....	3.12	9.95	4.16
1953.....	2.95	9.32	3.89
1954.....	2.61	9.12	3.52
1955.....	3.63	10.52	4.61
1956.....	3.59	11.92	4.67
1957.....	3.09	8.18	3.79
1958.....	2.98	2.91	2.97
1959.....	2.89	2.15	2.77

#### Rail and Non-Rail Operations: Accounting Classifications

Having concluded, in principle and practice, that railway assets in businesses and investments other than rail should not be used as a basis for setting freight rates, it throws particular emphasis upon the continuing need to distinguish those assets which are properly rail from those which are not.

Under Section 387 subsection 3 of the Railway Act,<sup>26</sup> the Board of Transport Commissioners is required to prescribe the items that shall be classed as relating to railway operations in the accounts and returns of railway companies. Under the operation of this section of the Act the Board has the power constantly to keep the Accounts Classification under review and to institute changes as necessary.

The recommendation recorded in this section of this Report respecting the application of railway other assets and income as a basis for establishing freight rates removes much of the need for the classification of accounts into rail and non-rail for revenue requirements determination. However, the analysis and recommendations respecting maximum rate control, which are developed in the following chapter, make it essential that this responsibility of the Board shall be continued. It will be necessary for the costing section of the Board to have clear-cut and appropriate guides to follow in the determination of rail variable and constant costs. To illustrate, the inclusion of assets and earnings of non-rail enterprise in rail accounts will distort the true finding of variable and constant costs of rail operations, as will the exclusion of those assets properly designated as

<sup>26</sup> Revised Statutes of Canada, 1952, chapter 234.

rail. In particular, over the next period of years, the establishment of firm principles and the accurate and adequate separation of assets and earnings of investments of railway companies in transportation businesses other than rail will become vital for cost-oriented pricing policies and regulatory accuracy in determining the allocation of resources between modes.

Therefore, we recommend that the Board shall be given every encouragement to review constantly all items in the Uniform Classification of Accounts, and be directed to review the whole Classification at intervals not longer than every two years, in order to assure that technological application and operating reorganization shall be accurately reflected in the Accounts.

In illustration of the general recommendation we would cite six specific examples where rapid changes seem to warrant review.

1. It is suggested that a reassessment be made of the communications operations, which seem to us to be now largely non-rail. If this is so, an appropriate user charge for the rail use of the communications system should be levied on rail operations.
2. It appears that certain docks and wharves are now truly rail-oriented, and should be examined thoroughly with a view to reclassifying from non-rail to rail.
3. A similar situation appears to exist with some off-line office buildings now classified as non-rail.
4. The use of railway-owned trucking investment to provide services strictly ancillary to rail operations, such as pick-up and delivery, are now designated as rail. However, with the growth of integrated rail-truck merchandising the distinction will become less sharp. The principle of designating the investment in trucks as non-rail and the use of appropriate user charges should be considered by the Board.
5. Railway-owned bus operations are presently classified as rail. In view of the recommendation made in Volume I regarding passenger service deficits and the burden they impose pending any withdrawal of service, consideration should be given to reclassifying railway-owned bus operations. It is no part of our intention that revenues and expenses of this type of operation should have any bearing upon the deficit position of rail passenger services.
6. Subject to exceptions in 4. above, investment by railway companies in businesses providing transport service by modes other than rail, should always be rigidly separated from rail-related investment. This does not mean that any company is to be inhibited in the choice of investment, nor in the development of integrated services and joint through rates. Depending upon the facts of the investigation in each case, it is possible to effect a division of revenues appropriately between the modes involved. But it is essential that the division of revenues for inter-modal traffic be made in relation to the costs of each, and the charges made on other carriers for inter-modal service be the same as the division of revenues between rail and another mode owned by a railway company. Particularly is this evident in "piggyback" or other container type of service in which more than one mode and more than one firm is engaged. Discriminatory pricing favouring a railway company's own vans or containers over those of other carriers is a form of inter-modal subsidization which, because of the nation's interest in rational allocation of resources, must not be permitted by the Board. Precisely the same analysis and recommendation applies in container exchange between truck lines, or for any service one mode performs for another.

#### Railway Ownership of Truck Lines

One final comment is appropriate in this chapter dealing with satisfactory competition. Representations have been made to us concerning the possibility of the great resources of the

railways being used to assert a monopoly position in the trucking industry.<sup>27</sup> We are satisfied that already these resources have made the two largest railway companies between them the largest owners of truck fleets in Canada.

What reasons are set out for this fear? We can find no evidence that this large ownership will, except for very short periods, lead to higher prices for truck transport. Such a brief windfall can exist for any truck owner. If the danger is real, the principles enunciated below for significant monopoly can be applied, and the restrictive trade practices legislation invoked.

We have stated that, with free entry, and the ever present possibility of private trucking, the structure of the trucking industry is such that effective monopoly in prices cannot persist. With competition thus protecting shippers, the only other disadvantage of large-scale railway ownership of truck lines lies in the danger that it poses to independent truckers. This danger can only persist if railway ownership is more efficient than either independent or private trucking. Efficiency should not be penalized.

We re-emphasize also that, in the environment of increasing public investment in road building, it is normal for management in transportation to attempt to invest in resources where the larger portion of costs are escapable.

However, railway ownership of truck lines involves two policy recommendations concerning this diversification. The first concerns the real economic advantages of combining road and rail facilities. To the extent that these exist, railways must be required to offer to all truckers rail facilities at prices and under conditions the same as are offered to rail-owned trucks. When a trucker decides to use rail facilities for part or all of the distance, he is a shipper and should have the right to come before the Board of Transport Commissioners in that capacity, either singly or jointly with others. In order that the Board may determine the realities of any inter-carrier discrimination, railway companies, by virtue of being truck owners, must be required to make fully available to the Board the pertinent cost and revenue data including, particularly, costs of capital.

The second recommendation concerns the possibility of hidden subsidies from rail assets or income to trucking operations, or vice versa.

The Board must be given authority to require the railways to keep strictly separate accounting of their operations inter-modally. The costing section of the Board of Transport Commissioners must be able, at all times, to provide the Commissioners with pertinent cost separations for rail and road operations of the railway company. Undoubtedly this will require initial and recurring changes in the Uniform Classification of Accounts, to keep them applicable to costing operations rather than for strictly balance sheet requirements.

Under these conditions, and with the publicity attendant upon the discovery of revenue transfers, and the possibility of legislative or regulatory restraint, we see no reasons to limit the entrance of railway companies into any other mode of transport. The experience of other countries with such restrictions does not encourage us to recommend it in Canada.

<sup>27</sup> The establishment of realistic prices for capital to the publicly-owned railway is particularly important in the purchase of truck lines.



## PRICING IN AREAS OF SIGNIFICANT MONOPOLY

The task of appraising the inequities in the freight rate structure and such changes as will alleviate them has been one of the most complex that has faced us. The task is complex because an appraisal of rate inequities must take into consideration such related elements as the background of existing rate regulation, the expansion of competition in transportation, the diminishing area of significant railway monopoly, maintaining the viability and promoting the efficiency of railway service and other components of the problem.

Regulation of railway rate maxima has from its beginning been based on the premise that railways enjoyed a significant monopoly in overland transportation and therefore their pricing practices must be subject to public review. The objective of such rate regulation was to protect shippers from inequitable rates, qualified by the consideration that net rail revenues should be adequate to maintain railway operations.

With the rapid advance of competition, particularly in the last decade, the area of significant railway monopoly has been steadily eroded. In the areas and for commodities where competition has developed, it can provide a satisfactory ceiling on transport rates. Yet in the diminishing areas where significant monopoly remains, the tendency toward inequities seems to have increased. The explanation for this lies in the unequal growth of competition which, while causing more railway services to become clearly uneconomic and thus subject to operational losses, has at the same time reduced the range of traffic on which such losses can be recouped by raising rates.

Thus, while the expansion of competition has recommended to us the importance of reducing the limitations of rate regulation on the railways where such competition exists, it also shows the importance of developing a new, limited but effective type of regulation where significant monopoly remains. The current approach to rate regulation is inappropriate for these tasks. Rate regulation as presently established is premised on measures of average monopoly, rather than significant monopoly. This is because the basis for permissive maximum rate increases has been the net rail revenue position — total revenue less total costs. In other words, the net revenues from both competitive and non-competitive sectors of the transport economy are averaged, yet rate increases have not been averaged. As competition spread in the transport economy, with its outwash of uneconomic rail services (many of which have been maintained), net revenues could be maintained in the circumstances by raising rates only in the shrinking non-competitive sector. The contribution of this complex of conditions towards the growth of inequities is remarkable. It is notable also for its reluctance to yield to a solution.

The resolution of this problem of inequities must be kept in perspective with several important basic considerations. First, it is necessary to preserve the viability of the railways through adequate net returns. In this respect, rates and revenues must be considered in relation to our recommendations in Volume I where we identified reasons for some revenue short fall because of the obligations placed upon railways to perform certain services by law or public policy, and in Chapter 5 of this volume where we elaborate measures to assist the railways to abandon uneconomic services, thereby reducing costs relative to revenues. Secondly, it is necessary to provide a means of protecting those shippers in the non-competitive sector, that is, those shippers without adequate alternative transport. The most effective means of providing

this protection is a suitable maximum rate control for this diminishing volume of captive traffic. Such maximum rate control, it should be emphasized, is recommended solely as a replacement to existing rate regulation, not as an extension of it. The old controls and the new will not mix.

This latter point is so important that we feel we cannot stress it too strongly for there is the very real danger that either through misunderstanding or inadvertence the recommendations for maximum rate control which follow will be only partially implemented or superimposed on top of existing regulation. Nothing could in our view be more harmful nor less in keeping with our findings and recommendations. The time is long overdue when the trend of legislation should begin to reflect the facts of the increasing competition which railways face, and it is our intent that the effect of our recommendations should be to change the nature and reduce the extent of rate regulation over railways while retaining the necessary minimal controls required. It would be a serious misconstruction of our recommendation respecting regulatory rate control to attempt to implement our proposal for maximum rate control within the present system. Specifically, the proposal for maximum rate control set out in this chapter is designed to replace the present unsatisfactory maximum rates and we state, with great emphasis, that a partial implementation will not succeed.

### The Determination of Significant Monopoly

Because a relatively small and declining part of the transport market is exposed to significant monopoly and to the inequities which rate increases in that sector may impose, it is clearly important that a measure be established which can more readily and sharply determine the existence of significant monopoly than has been possible with measures now in use. Any recommendation for its control demands such a measure for its identification. It is to this identification of significant monopoly that the analysis now turns.

Before the practical distinctions between competition and monopoly can be fully appreciated it is necessary to subject the ratemaking process to analysis. To begin with, how would an omniscient, omnipotent ratemaker establish the rate for a particular commodity movement in order to maximize net revenue or, alternatively, minimize loss.

Railways in common with retailers, manufacturers and service industries are price (or rate) setters. That is to say, subject to any restraints or limits which may be imposed by law, the ratemaker is responsible for choosing the price and announcing it to the buyer or shipper. A railway, in common with other price setters, advertises its service, announces its price and the price taker (the shipper) is free to decide the amount of the service he will take at that price. The problem facing the profit-maximizing price maker is to choose that one best price for a given product which will maximize his profits. In order to make this decision correctly in the transport industry, the ratemaker will have to measure, estimate, or simply guess at certain fundamental economic relationships. First of all he must know the relationship between the costs which his company incurs and the amount of freight which they handle. More particularly he must know the *additional cost* (usually called marginal or incremental cost) which will be incurred if additional traffic is handled, and, of course, he should know what savings could be realized if some increment of traffic is *not* handled. It is customary in railway costing to distinguish only between fixed and variable costs and to use variable costs as an approximation of marginal costs. This is essentially the approach of most firms that use direct costing. This assumption is reasonable if the cost-output function is linear or nearly so; that is to say if each additional ton-mile of traffic increases total costs by the same amount. Incidentally, if the rates are to be in effect for some time, the ratemaker must be interested in long-run marginal cost. What costs are variable, and what costs are fixed depends of course on the length of the time period considered. There are

many items of cost each having different life. For example, the costs involved in maintaining a given fleet of box cars are very nearly fixed in the short run, but given enough time these costs can be escaped or increased as the size of the fleet is adapted to the traffic handled.

The next ingredient necessary for his ratemaking decision is the "demand function". This is simply a schedule of the number of ton-miles which will be demanded by shippers at all possible rail rates. When plotted this schedule becomes the "demand curve". As shown in Appendix A to this chapter, this demand curve may be inelastic (i.e., quantities shipped are not highly sensitive to small movements in rates) for individual shippers. Or, it may be elastic, i.e., quantities shipped are highly sensitive to rate movements.

But this elasticity relationship between rates and the quantities shipped varies over time. In the short run, the demand function tends to be inelastic for all shippers. In the longer run, it tends to be more elastic. This tendency for the elasticity to increase with time is related to the problem of rate inequities. This is because the increase in elasticity over time opens two channels by which the railways can influence their revenues by adjusting rates. One of these ways is to raise whenever net revenues fall below revenue requirements. Shippers will pay the higher rates in the short run, that is, until they can seek alternative forms of transport. Shippers successful in finding lower-cost transport go elsewhere eventually, thereby reducing the net revenues of the railways and setting the stage for another rate increase to recoup lost revenue and further reduce traffic. This is the short-run channel, which, it may be seen, tends to increase rates and inequities while reducing the volume of traffic.

The other channel is the long-run approach. This involves lowering rates, where warranted by cost-profit conditions, as a means of improving the revenue position. In this case, net revenues may fall in the short run but in the long run with the greater elasticity of demand, the lower rates tend to attract more traffic and, unless set lower than demand requires, will build up net revenues. Using the long-run approach, there is no increase, and may be a decrease, in rate inequities.

It may be apparent that choosing the short-run or the long-run demand as a basis for ratemaking can have profound significance for the railways. Ratemaking that exploits short-run inelasticity of demand to bolster the short-run cash position tends to increase inequities and encourages a reduction in the volume of traffic. Ratemaking that exploits the long-run elasticity of demand tends to expand the volume of traffic and to reduce rate inequities, at the possible expense, perhaps, of the short-run cash position.

It follows also that the more knowledge the ratemakers have of the short- and long-run elasticity of demand, the more effectively they can select rate levels which will maximize the long-run profitability of the carrier. The technique for making this selection may be briefly outlined.

Having estimated, on the basis of the demand function, the reaction of shippers to increases or decreases in the price (or rate), it is a matter of simple geometry or arithmetic to calculate their revenue effects, i.e., the additional revenue, or loss of revenue, that will accompany a change in rates. It is also apparent that so long as the extra (or marginal) revenue exceeds additional (or marginal) cost it will pay to lower the rate and encourage more traffic. If marginal revenue is less than marginal cost, it may pay to raise the rates and thereby reduce the ton-miles performed. Once the optimum position has been established, further increases in freight rates will reduce profits just as surely as will reductions in rates. High rates do not inevitably mean high profits.

On the contrary, under conditions of modern technology, the maximum profit tends to be obtained by maximum volume at lower levels of cost. The development of mass-production techniques has brought with it a reversal of the conditions of which the traditional view of monopoly was based.<sup>28</sup> The result has been, in transportation as in other large-scale enterprises, that much greater emphasis than in the past must be given to expanding effective demand so capacity can be utilized more fully to gain the benefits of lower mass-production costs.

Moreover, while it can be seen from the foregoing that costs and demand are equally important in the determination of the optimum rate it would be incorrect to say that the railways (or most other businesses for that matter) have placed equal emphasis on research in these two areas. While we found rather sophisticated applications of statistical inference to costs we did not find evidence of the same quality of analysis applied to the problem of estimating demand. This was well illustrated by all the presentations on the problem of the Crowsnest Pass grain rates. After millions of words of evidence on the cost of moving the grain traffic, the estimate of demand was limited to the sole observation that the farmers could not afford to pay higher freight rates. Obviously this did not mean that if the Crowsnest Pass rates were raised by a few cents the Western farmers would stop growing wheat.

It might be argued that a rate structure based on a value of service principle does involve a crude attempt to measure demand. But in the first place, how bad an estimate of demand it is, is attested to by the way in which the railways have failed to retain the movement of high-valued commodities. Given transportation competition, the assumption that elasticity of demand is in a direct way related to the value of the commodity becomes highly questionable. Recognition of these demand implications of competition for pricing decisions is essential to effective ratemaking.<sup>29</sup>

Having established the framework in which a pricing decision is made, it is now possible to examine practically the concept of competition and monopoly. The degree of competition or monopoly which attaches to a product (or service) in the market place is influenced more than anything else by the number and closeness of substitute products offered to consumers. It is conceivable that this may range from a market situation where only one product or service is offered without any close substitutes (monopoly) to a situation where a large number of close substitutes are offered (competition). In fact, most markets lie somewhere between these two extremes. There are, in other words, varying degrees of monopoly. It is customary to measure these degrees of monopoly by the slope of the demand curve,<sup>30</sup> whenever such slope can be satisfactorily measured or estimated. But in transportation, such measurement is subject to more than the usual

<sup>28</sup> Cf., Drucker, Peter F., *Concept of the Corporation*, Boston, 1960 (rev.), p. 219, where he states, "This theory of monopoly which is still widely accepted as gospel truth, rests on the assumption — correct in the eighteenth century — that supply will always be limited, whereas demand will always be unlimited. On this assumption, monopolistic behavior will indeed yield the maximum profit. But under modern industrial conditions, it is not supply that is limited, but demand; supply in modern mass-production industry has, by definition, no practical limitations. It is simply not true that contraction of production and artificial maintenance of high prices will always yield the highest profit to the producer". On this basis, maximum rate control may be expected to stimulate ratemaking that will support higher, rather than lower, net profits for the railways.

<sup>29</sup> See, for example, Dr. Joel Dean, *Cost Analysis for Competitive Railroad Rate Making*, Railway Systems and Procedures Association, Chicago, 1959, p. 8-9, "It should be noted that a ceiling established by your customers' alternatives is far from a unique characteristic of railroad rate-making; quite the contrary, this is a fundamental rule of all competitive pricing. For many years most railroads did not feel much restraint from such a ceiling because the ceiling was then very high. It was high because alternative modes of transport were poor substitutes for rail transport and because price competition within the railroad industry has been effectively restrained by rate bureaus and government regulation. Hence customers' alternatives took the form of not shipping or not producing the commodity. It was this non-transport alternative which produced the 'value of service' principle of railroad rate-making. But the development of highway networks destroyed forever this aspect of the early railroad monopoly position."

"Transport alternatives available to shippers differ in two dimensions — price and service. To be competitive, railroad rates must take account of both."

<sup>30</sup> See Appendix A to this chapter, p. 60.

difficulties of accurate estimates of demand. It is subject also to the kink in the demand curve that develops at the point where rates rise to the level where higher cost carriers may compete.<sup>31</sup> This kinked or discontinuous demand curve makes the slope of the curve too uneven for use as a precise measure of monopoly but it leads the way to another, more satisfactory measure to test for specific instances of significant rail monopoly.

Our examination has clearly shown that a rational and objective measure of the degree of significant monopoly can be based on the relationship between cost and price. This would apply only when conditions occur which prevent the entry of new firms.<sup>32</sup> In comparing degrees of monopoly among different products one would obviously need to examine the relative rather than the absolute spread between cost and price. Hence, in the case of railway shipments, the degree of monopoly for each could be measured by the difference between rate and cost divided by the cost. Alternatively the same effect could be obtained by expressing the rate as a percentage of cost. It is essentially this relationship of rate to cost which provides the basis for our proposals regarding maximum rate control.

### Measures of Significant Monopoly

If entry into the transportation business was easy, if capital was mobile and flexible, rates that were significantly above those yielding normal profits would encourage other firms to come in to compete for the business. In fact, entry into the railway business is not free. The amount of capital required is enormous and would by itself restrict the number of firms which would be willing and able to enter. Furthermore, restraint is offered by the fact that rail transportation is a declining cost industry. Where one or two firms might survive with a profit the entry of another firm might mean disastrous losses for all concerned. It is this lack of freedom of entry which opens up the possibility that there are pockets of traffic throughout the country where there is still a positive degree of monopoly and where there may even be a significant degree of monopoly — significant enough that the shipper might be able to justify his demands for some measure of protection on economic grounds.

The application of the concept of monopoly to railroad transportation today calls for some refinement, or at least re-statement, of the traditional theory. To begin with, the term monopoly has generally been used in economic literature to refer to the total sales of either a firm or an industry. By inference, therefore, the term has usually implied a price-quantity relationship involving a large number of transactions. When the economist refers to the degree of monopoly, therefore, he generally means an average degree of monopoly, the average being based on a large number of individual transactions.

It may be questioned whether an average degree of monopoly is of much interest to the public authorities when that term is applied to Canadian railways in the latter half of the twentieth century. With the intensification of truck, water, air and pipeline competition, we are less concerned that the railways are exploiting all shippers than with the possibility that a significant element of monopoly may still persist in a few cases. It may very well be that if it were not for the tradition of regulation of the railways, we could look only at the average degree of monopoly and if this did not appear to be excessive, we would dismiss rate regulation on pragmatic grounds. After all, the degree of monopoly which any firm enjoys varies widely from customer to customer and even from sale to sale. Many business firms enjoy individual markets in which they have a

<sup>31</sup> *Ibid.*, p. 60-61.

<sup>32</sup> *Ibid.*, p. 61.

significant degree of monopoly, yet so long as their over-all degree of monopoly is not obviously high it is not deemed necessary to impose price regulation.

The average degree of rail monopoly as measured by the difference between total revenues and total costs is not high; indeed it is, by the test of profits, lower than in many industries in Canada. One might argue, then, that the nation must be content with a rough economic justice. We have recognized that there is an increasing amount of competition in the transportation business. It may very well be asked, therefore, if monopoly regulation is not merely a relic of the past which could be safely dispensed with today. This Commission believes that the average degree of monopoly which the railways have today is not itself significant and would not itself justify elaborate and expensive rate regulating machinery.

Nevertheless we found evidence that for some rail movements the rates were many times higher than costs, indicating that a significant degree of monopoly still exists in at least a few commodity areas. Some evidence of the substantial variations in the degree of monopoly is provided by the very uneven incidence of freight rate increases in the post-war period. Railways have found it possible to implement much larger percentage rate increases on some movements than on others. It was conceded in evidence before us by witnesses for the Canadian National Railways that there remain commodity movements for which the railway has a significant degree of monopoly. There is every reason to believe that similar situations exist with the Canadian Pacific Railway Company.

For these reasons we are not prepared to recommend at this time the complete abandonment of all rate regulating machinery. However, we do believe that the existing machinery, geared as it is to the class rates and designed to control the average degree of monopoly, is out of date. Regulatory machinery should be adopted which is more in harmony with the realities of competition, and which accords more closely with the existing practice of ratemaking.

We look forward to the day when, because of effective competition throughout the nation, maximum rate regulating machinery may be scrapped completely and it is our intention that whatever steps we recommend should contribute to progress toward that goal. We expect that our proposals will mean less regulation rather than more and that subject to the maximum rate rule the railways will have all of the discretion on non-statutory pricing matters that any other company would have. The government, the shippers, and perhaps even the railways themselves must begin to treat railways more as normal commercial operations.

We anticipate that our recommendation on maximum rate control will facilitate at least an evolution, if not the revolution that seems necessary, in the approach to regulation of our railways.

The railways have demonstrated that they are taking a new approach to ratemaking. In fact one of the reasons that the Commission went into the Crowsnest Pass grain rate problem so extensively is that it afforded a unique opportunity to study the new railway costing techniques. While we saw much less evidence of the new estimating techniques being applied to the demand side, even here there are indications that advances are being made. In fact, as demonstrated in Appendix A, one of the critical aspects of the demand function — the point at which the demand curve breaks and becomes horizontal — is itself a matter of estimating the cost of the next best transportation mode. In other words we are moving away from a traditional rate hierarchy towards a more cost-oriented rate structure. It seems to us that from the point of view of the railways it would be desirable if the new maximum rate control machinery more closely mirrored their new approach to rate setting than is the case with existing controls.

### Objectives and Attributes of Maximum Rate Control

The objectives of the National Transportation Policy call for the regulatory powers of the state to continue to be concerned about maximum rate control at least for the time being because where significant monopoly exists, allocation of resources is not at the optimum and does not tend toward the optimum as it would under conditions of satisfactory competition. The power of the state must, in transportation as in other monopoly areas, attempt to substitute for competition. With the assistance of new techniques for determining the components of railway costs the degree to which regulation can move resource allocation toward the optimum by maximum rate control is much enhanced.

There are reasons other than optimum resources allocation for the nation's concern with maximum rate control. The first is that such control sets the limit to the burden which any particular shipper must expect to bear. Second, the regulatory authority in acting as an appeal board provides a forum for the shipper who feels he is being unjustly treated. In the presence of competition the shipper feels a security from the knowledge that he is not dependent upon the decisions of any one firm. Even though he may loyally remain with one transportation firm, the existence of alternatives gives him some bargaining power in his demand for service. The market place provides the opportunity for effective protest and even the existence of a more expensive form of service is some relief.

To the shippers who are truly captive to the railway, i.e., those who have no practicable alternative, so such feeling of escape presents itself. Every shipper by any mode of transport is bound by the operating rules of that mode. Trains, planes and buses leave at scheduled hours and the rules of the service are imposed on the individual to enable the best average level of service to be given. When competition exists the shipper has chosen the rules to which he will be subject. When it does not, he must perforce accept the rules laid down by the mode he is forced to use, and an outlet for appeal from the conditions of such captivity becomes a legitimate interest of the regulatory function. It is no accident that the regions of Canada where competition to the railways is less pervasive have been the most active before the Board of Transport Commissioners.

Before discussing the mechanism of maximum rate control it must be stressed that any effective control must move in line with the changing transportation environment. Old criteria of maximum rates, based on the traditional rate structure, with emphasis on the value of the commodity, are increasingly less effective. It is the aim of this Report to see fewer and simpler rules established which will be more precisely effective. The new rules, to be logical and understandable, must apply to those particular pockets of significant monopoly which exist, and not to the average degree of monopoly.

As competition grows, a larger and larger percentage of railway traffic is composed of heavy-loading, longer haul commodities. Any new system of maximum rate control must provide a measure of defence against significant monopoly in the movement of these commodities. Yet, to be realistic, consideration of the degree of significant monopoly must begin at the base point that maximum rate ceilings must not worsen the financial position of the railways, or captive commodity movements will have no means of transportation at all.

We have recognized throughout this Report that a period of grave change faces the railways in Canada if they are to achieve a truly viable place in the transportation complex. We have urged that the nation recognize its share of the responsibility for the difficulties the railways have in meeting competition. We have suggested, moreover, that only the railways themselves can initiate changes in plant and service to equip them to meet their competitors. Throughout the period of transition significant changes in the patterns of railway costs will emerge which will

change the relationship between variable and overhead costs. But, for the interim, the maximum rate applicable to any movement has to face the realities of the railway plant as it exists. This is only to say that maximum rates might possibly be lower with an ideal railway plant than they can be with the extant plant. The national assistance we have recommended for facilitating the rationalization of plant and services will reduce cost and therefore help to reduce maximum rates.

It would be desirable if the new criteria of maximum rate control made some contribution to the solution of the long-haul and short-haul problem. It has been argued before this Commission that terminal costs have increased more than line-haul costs. Because of the way in which rate increases have been applied, the long-haul shipper has had to bear an increasing proportion of total rail costs. It is our conviction that maximum rates based on a cost-rate relationship will help to prorate the relative impacts of terminal and line-haul costs.

To summarize and itemize we set out as objectives of maximum rate control the following:

1. It must limit the impact of railway monopoly upon shippers.
2. It fails in its purpose if it is seriously detrimental to the revenue position of the railways.
3. It must be flexible enough to reflect at intervals the changes in railway costs which will occur with the rationalization of plant and services.
4. It should leave incentives for efficiency with the railways and offer incentives to the captive shippers to use transportation as economically as they would in a competitive environment.
5. It must be in keeping with newer ratemaking practices.
6. It must not be in conflict with the optimum allocation of resources in transportation.

In addition to these necessary objectives there are some attributes which would be desirable to have associated with maximum rate control.

1. It would be desirable that it provide some solution to the additional burdens which fall on the long-haul shipper.
2. If possible the regulatory and appeal machinery should be rationalized and simplified to use less time and energy in hearings.

#### **Mechanism of Maximum Rate Control: Railways**

It is our conclusion that maximum rate control can come closest to attaining these objectives and gaining these attributes if it is based on the variable costs of the particular commodity movement plus an addition above variable cost such as will be an equitable share of railway fixed costs.

Tying maximum rate control to variable costs necessitates establishing a standard weight as a basis for precise and comprehensible maximum rate construction. This implies that the maximum rate shall be tied to a key carload weight. Having the maximum rate based on a key carload weight would permit incentive features to stimulate economical loading and handling and would leave open an area for negotiation between the railway and the shipper for the sharing of such economies as result. Within this area, negotiation would proceed under ordinary business methods.

The determination of the key carload weight merits examination. The necessity of regulatory control arises because of the lack of alternative carriers. In the past when and where significant rail monopoly has been eroded, the truck has usually been the instrument effecting it. In almost

every remaining case of significant monopoly, the alternate carrier would be the truck. Thus the key weight upon which it is reasonable to base a maximum rate is the weight of the unit load the competing carrier could use to give his optimum rate. We propose that the carload weight upon which rail variable costs shall be determined for purposes of maximum rate control be 30,000 pounds in standard railway equipment.

Two considerations support this qualified 30,000 pound key weight. First, if the commodity loads lighter than 30,000 pounds in standard railway equipment it is probably an expensive commodity to handle on a weight, if not a cubic, basis. Secondly, if the commodity is heavy loading but is shipped in small quantities up to only 30,000 pounds, it is in effect an L.C.L. movement, which again has a very high cost per pound. In either case we found that there was little dissatisfaction with rates on the part of shippers who fall into these categories, and such dissatisfaction as there is stands to be alleviated by the forces of competition before long.

It is our recommendation that for purposes of maximum rate control the variable cost should be construed to mean the long-run variable cost determined for the particular movement involved. Reference to the studies prepared by the railways, the provinces and the grain trade on the costing of grain and grain products moving at statutory and related rates will be a guide in determining the components of long-run variable costs. The special studies, published in Volume III,<sup>33</sup> on the costing techniques applied to the Crowsnest Pass rates could serve as a guide for the Board of Transport Commissioners.

From the evidence presented to us it is clear that the calculation of these rail variable costs should present no great difficulties. Under the stimulus of competition and the natural managerial goals of seeking profitable business, the major railways are constantly engaged in sampling and testing various segments of traffic for various operational and accounting reasons, important amongst which is the desire to know the variable costs of movement. Once certain specific conditions have been laid down, techniques already in existence, when applied to the traffic and accounts data already extensively collected, yield variable cost figures with reasonable reliability. Amongst these conditions are the operating circumstances under which the traffic shall move, such as distance, load per car, types and numbers of cars in each movement, terminal and other handling procedures, etc. The costing section of the Board will, of necessity, keep abreast of developments in the science and art of determining variable costs.

The variable costs so determined could exclude the costs of optional services which would be subject to a separate charge by the railway according to schedules filed with the Board.

In addition to the necessary components of variable costs, the process is incomplete without some indication of the length of time over which the costs shall apply. The general rule would be: the longer the period of time, the more costs become variable with traffic. Nevertheless, for all practical purposes, there are some costs which do not ever vary with traffic volume. These must somehow be covered by railway rates, including maximum rates. The function of maximum rate control is to place limits upon the share of these fixed costs the captive shipper must carry. The weight of the burden of inallocatable overheads determines the justice and reasonableness of the rate.

The additional portion of the maximum rate above the associated variable costs must, for simplicity and for the equity which comes from uniformity, be a figure expressed as a multiple of the variable cost. The variable costs, based on a simulated truck-competitive load of 30,000 pounds,

<sup>33</sup> *The Problem of Grain Costing*, by D.H. Hay, to be published in Volume III of this Report.

may differ for each movement. The addition to variable costs, that is, the contribution to fixed costs, will be a multiple of variable costs and, as such, will be stated as a constant percentage of them.

The cost structure of the railways, with their relatively high proportion of fixed to variable costs must be reflected in maximum rates. The equitable contribution allowed by maximum rates should not be less than 150 per cent of long-run variable costs. This percentage above variable costs, applied to types of traffic captive to rails under the mechanism set out in the next section, would not be detrimental to railway revenues at the present time. We recommend therefore that a maximum rate be the variable costs appropriate to the movement as defined by the Board of Transport Commissioners, plus 150 per cent of that variable cost. This we conclude is a reasonable share of the burden of fixed costs which traffic, designated captive under the criteria set out below, shall bear.

The definition of variable cost is different depending upon whether one looks back to historical costs or forward to prospective costs. In setting maximum rates it is expected that the Board of Transport Commissioners will need to have reference to historical costs. But the technological and organizational changes which occur over the next few years will cause changes in the content of variable costs and in the relationship of variable costs to total costs. In consequence, the Board of Transport Commissioners must constantly review its definition of variable costs for maximum rate control and periodically reassess the appropriate relationship between variable and fixed costs to determine from time to time necessary changes in the addition above variable costs. We propose that the first categorical reassessment of the relationships between variable and fixed costs be undertaken at the end of the five-year period of public assistance for passenger-train operational deficits, when branch line rationalization will have progressed.

In our view the objectives of satisfactory maximum rate regulation are largely achieved by this form of control. Shippers of commodities subject to such a maximum will have the knowledge that the burdens of railway overheads are rationally apportioned on a basis of cost, and equitably borne. They will find that, so far as their traffic can be encouraged in volume, incentive loading and volume rates may be sought and bargained for. The long-haul shipper, captive to rails, will know that the maximum rate reflects line-haul and terminal costs without undue distortion. The railways, on the other hand, will not be forced to adhere to maximum rates which ignore changing cost and traffic patterns and opportunities for more efficient movement of traffic. An element of incentive inheres in any rate-controlled movement if opportunities exist to economize. New investment and technological and organizational changes which enlarge capacity, open to traffic officers new opportunities to assess each movement so affected and offer such incentive rates as are possible without interfering with maximum rates over the system.

Finally, the nation can be assured that this scheme of maximum rate control does not restrict optimum resource allocation, and, to the extent that it reflects costs of movement, should enhance it. Periodic re-evaluation of the components of variable cost and of the relation of total variable to total fixed costs, will ensure the continuing efficient reallocation of the resources needed in the transportation industry, insofar as they bear on captive movements. The resources of time and energy devoted to the determination and application of maximum rate regulation will also be reduced as rules and definitions are developed.

#### **Application of Maximum Rate Control**

The decision to seek captive status must rest with the shipper. His reasons for initiating the action will be dissatisfaction with the rate he is forced to pay. His first step will be to attempt to effect an adjustment from the railway company concerned. Failing satisfactory settlement the

shipper will apply to the Board of Transport Commissioners for an examination of his rate by the criteria established for maximum rate control.

The first application to the Board will enclose copies of the relevant correspondence with the railway, or other evidence that rate negotiations with the railways took place and that from shipper's point of view they were not successful. The application will set out the rate paid, the origin and destination of the movement, seasonality, approximate minimum tonnage at indicated intervals, and details of the nature of the commodity shipments for assessment of loadability, fragility, damageability, perishability, etc., and information on the type of equipment required. On the basis of this information the Board will be able to give him a range within which his maximum rate would probably fall. This can be done without much delay as the estimate will be made on the basis of regional or system average costs. A nominal charge of, say, \$25.00 should be made for the service. This ends the first stage of the application.

If the shipper feels it is worth his while to ascertain specifically his maximum rate he must apply formally for a special study. The cost of the detailed study is the responsibility of the complainant. It will probably be in the range of \$300 to \$500. Upon securing such additional information as is required, the Board will determine the maximum rate for the movement of the commodity between the points and under the circumstances prescribed in the application. Having received the maximum rate determination, the shipper then decides whether to declare himself captive.

The shipper's declaration to the Board of Transport Commissioners that he is captive must mean what it implies. In exchange for the maximum rate, the shipper is bound to confine all the traffic in question to the railway at the maximum rate under the conditions stipulated in his application. Unwillingness to assert his captivity means that he has alternate modes of carriage available to him or hopes to have. The maximum rate and traffic commitment will be in effect for one year, in any case, and will continue until the Board is notified of cancellation by the shipper. After cancellation, rates on the relevant traffic can be set freely by negotiation between the shipper and the railway.

After the initial one-year period the railway company concerned may offer evidence to the Board, and so notify the shipper, of any changes in associated variable cost. After verification, the Board may determine any change in the maximum rate applicable to become effective after the appropriate interval.<sup>34</sup>

During the period of captivity, there is nothing to inhibit the introduction of a lower incentive rate, or the development of additional charges for special services demanded by the shipper. Performance standards by railway and shipper, which go far towards determining the variables, will be determined by the shipper in his application. Additional services he may require, or services he may wish to discontinue, are not to be the basis of a new application. These will be determined according to the regional or system scale of rates applicable to the service, constructed by the railways and filed with the Board.

Determination of rates for maximum rate control as set out by the suggested mechanism we believe will fulfil the second desirable attribute of any scheme of maximum rate control, i.e., simplified regulatory machinery. It appears valid to us to suppose that the new maximum rate control will be less cumbersome than the old. The test of significant monopoly is relatively simple and we do not see why the operation of the machinery should require any public hearings

<sup>34</sup> Since the determination of the variables, and changes in variables, for large segments of traffic will be a continuing process in the costing section of the Board, maximum rate adjustments will become a significant part of the work of the Board of Transport Commissioners.

whatsoever. The first stage of the application should not take more than one or two weeks to process after experience has been gained. The determination of the variables will be in conformity with the practices already being developed by the railways and it should not take too long for the cost experts of the Board to collect the necessary information to arrive at a decision. In time the costing section of the Board will acquire a sophistication in the knowledge of railway costing that will enable the Board to render decisions in very little time.

The implementation of this recommendation will see the end of general permissive horizontal percentage rate increases and the expensive and protracted hearings which accompany them. That in itself should save the nation large resources in time and manpower. Within the controls for minimum rate regulation which have been spelled out in Chapter 3 and maximum rate controls as set out in this chapter, the railways will be free to set individual rates by ordinary business standards and to adjust them upwards and downwards as the competitive conditions and changes in cost patterns require. With this freedom the time lag between cost increases and the permission to apply rate increases is eliminated. Even those rates which are set at the maximum are annually adjustable upwards after the initial one year contract, or downwards immediately as circumstances require.

Considerable concern was displayed by the railway companies who appeared before this Commission at the possibility of cost information becoming generally available. It is possible that this concern may be a basis of objection to this scheme of maximum rate control. There are two comments appropriate to allay the concern.

The first is that there is no particular commercial significance to variable cost. It differs with each type of shipment, each length of haul, each service peculiarity demanded, and, furthermore, is not necessarily the basis of establishing the minimum rate. The establishment of a maximum rate and the knowledge of the percentage of the variable which will be applied to the variable will enable the captive shipper to know the variable costs of his traffic movement. But this information is of no more use to a shipper or other carrier under the new situation than is knowing the rates charged various shippers in the present system.

Secondly, it is to the railways themselves that we are indebted for the great mass of costing data and techniques which were brought forward in the presentation which attempted to demonstrate in the public hearings of this Commission that the full costs of moving grain and grain products to export positions made necessary a rate approximately in the relative position that grain occupied in the traditional class-rate structure. The cost results have become public information and will remain so. It is our conviction that a great contribution was made by the railways toward a solution to this nation's transportation problems by the revelation of these nascent techniques. Railway transportation business in Canada, so long as pockets of significant monopoly persist, is public business. Public business involves public review. Such limited review of railway costs cannot harm the conduct of the nation's transportation business so long as each mode is free to compete on the basis of its cost patterns.

The proposal outlined here for establishing maximum rate regulation deals with the rate a captive shipper pays to an individual railway for the movement of a commodity, point-to-point, on one railway system. Variable costs are predicated upon the costs associated with movement over one railway system. In Canada one important qualification must apply.

In many cases shipments could move by more than one railway, or partly over the lines of several. In these cases it is customary for all railways to quote identical point-to-point rates. In the case of maximum rates, which costs should apply? It seems to us that so long as we maintain a mixed private and public ownership in the railway industry in Canada all railways must operate

with essentially the same set of rules. This means specifically that the capital costs which should be applied in the determination of variable costs for testing maximum and minimum rates are those approved by the Board of Transport Commissioners as proper for the privately-owned railway. Apart from this, however, it is logical that the other costs must be calculated for the short-line distance.

### **Introduction of Maximum Rate Control**

Any change of regulatory control over maximum rates must, to be initially successful, be applied with due regard to the institutional and financial relationships which have grown up under the older system. Here, as in other instances where change will be necessary, we recognize that the method of application chosen which will ease the transition period will be most worthwhile to carriers and shippers and the regulatory agencies. The danger lies, of course, in slowing the pace of change too greatly, out of excessive concern for traditional procedures, and thus delaying implementation until the problems are worse compounded.

In proposing an entirely new mechanism of maximum rate control to meet the changes which are inevitably occurring, we recognize clearly the dislocations which abrupt introduction would make. In moderating this pace of change there are three important factors to consider and provide for during the period through which adjustments are being made.

First, existing rate relationships, while far from ideal, must be adjustable over time if serious and abrupt market disturbances are to be avoided. Second, present revenues of all carriers must not be significantly affected if all modes are to be preserved while energies are being directed toward adjusting to the new regulatory environment. Third, those shippers who have received some measure of rate protection either by the old system of maximum rate controls or by competition must continue to receive at least the same measure of protection during the period of adjustment.

In considering the method of applying the new maximum rate control, the protection being extended by law and regulation at the present time must be the base from which to proceed. At the present moment, effective regulatory ceilings are being maintained by means of the Freight Rates Reduction Act which came into effect August 1, 1959. The circumstances leading up to the passage of that Act illustrate two things. The first is that both the Board of Transport Commissioners and the Privy Council found that the revenue requirements of the railways justified the horizontal increase of 17 per cent permitted to the railways by the Board of Transport Commissioners, Judgment and Order 96300, of November 17, 1958.<sup>35</sup> However, Parliament recognized that this increase, while necessary to the railways, was too high to be equitable for those shippers subject to the full 17 per cent. The Freight Rates Reduction Act rolled back the rates so affected as far as an annual payment of \$20 million would reduce them. The \$20 million was the amount Parliament saw as adequate to fill the gap between the rate levels deemed equitable to railways and the level deemed to be just and reasonable to shippers subjected to the 17 per cent increase.

One of the chief responsibilities laid upon this Commission was to assess the problem of inequities in the freight rate structure. Our problem, as we see it, is to attempt to substitute a more realistic method of maximum rate control for the traditional class rate maximum, which will protect the captive shipper and not limit the operation of commercial principles in the growing competitive sector. In our view the Freight Rates Reduction Act was an acknowledgement by the Government and Parliament of Canada that there then existed a double standard of equity in the freight rate structure. On the one hand, the revenues needed by the railways, which determined

<sup>35</sup> Effective December 1, 1958. This was amended to read 10 per cent for 17 per cent by Judgment and Order 98424, dated July 10, 1959, effective August 1, 1959.

the extent of the general permissive increase, were recognized and met. On the other, the complaints of shippers subjected to the increase were met by lowering the maximum permissive rates. An acceptable measure of equity was restored to shippers and equity preserved to the railways by the \$20 million subsidy until Parliament could receive and act upon this Report.

Thus the clash between the older traditional maximum rate control and the realities of the competitive environment had, by 1959, resulted in a most unusual situation. The claims of shippers and the railways for equitable treatment were only resolved by the establishment of a double standard<sup>36</sup> of equity. Obviously, unless the nation is forever to bridge the gap between the two standards, some method must be found to bring them together. We sought, and found, the reasons in the structure of railway costs, swollen beyond the ability of the traffic to support them because of a number of obligations the railways could not escape. It was to these larger factors that we addressed our attention in the first volume of our Report. It is our conclusion, and our recommendation, that the nation can and should lift the burdens remaining upon railways by law and public policy, and thus restore to management the responsibilities for financial health which properly belong to it. The proposals outlined in Volume I are designed to discharge the chief public responsibilities for railway revenues. They are also designed to eradicate the main causes of inequitable freight rates so far as there is any public responsibility and, combined with the scheme for maximum rate control which has been proposed in this chapter, to protect the exposed shipper from any measure of significant railway monopoly.

Therefore, we recommend that, upon acceptance in policy of the plan for control of maximum rates, those rates which are now the effective rates being borne by all movers of commodities by rail on their own account under the provisions of the Freight Rates Reduction Act, shall for purposes of maximum rate control be rates considered just and reasonable. The test of maximum rate control as outlined here shall not apply to rates now effectively in force.

Following the adoption of this base, and after implementation of those proposals for restoring an equitable basis upon which rates shall be made, as recommended in Volume I, we recommend the repeal of the Freight Rates Reduction Act. From that moment on, the railways shall be given the freedom to make rates by commercial principles, subject only to the maximum and minimum rate controls we have advocated. Upon the increase of any rate, the mechanism for testing the rate may come into play at the discretion of the shipper who is prepared to declare himself captive.

It may be useful to explore the consequences of this technique for transferring from the older to the new regulatory system.

If the procedure as outlined is adopted, those shippers who might otherwise be subject to the old class rate scale maximum will not revert to it. Until the railways choose to raise those rates, such shippers will remain under the protection afforded by Parliament's action in rolling back what had become unsatisfactory maxima. Only when such a rate is raised by the railways will it become subject to the new maximum control. Rates which were not at the level of the old maxima are presumably set at their present level by commercial criteria. If such rates are increased it will be because of commercial criteria in the light of new circumstances. Each shipper so affected, if he has reason to suspect significant monopoly, can then have recourse to the railways and to the Board to have the new rate judged by the new maximum rate control.

For the carriers' part, this order of procedure for introducing maximum rate control will avoid any immediate attrition of revenues. The temporary and emergency annual payment of \$20

<sup>36</sup> Forewarning of this inevitable conflict was given a decade ago when the "roll-back" principle was invoked in what is known as the "bridge" subsidy, in what was a rationalization of an attempt to secure adequate revenues without raising maximum rates beyond the equitable level.

million will be replaced by those measures of assistance recommended in Volume I designed to correct the root causes of inequities, rather than palliate the effects. Railways, in common with other carriers, particularly trucks, will be free to make independent assessment of all their rates, and adjust them as business acumen directs, subject only to the maximum controls over significant monopoly and the minimum controls of directly associated costs of the movement. On the part of the public of Canada and its elected federal representatives, the order of procedure will permit the protection of maximum rate control to be continued at the level deemed just by the emergency legislation of the Freight Rates Reduction Act, while affording opportunity to move to a more permanent scheme of control at a pace dictated by changes in the competitive transportation environment and changes in the railways' cost patterns. And, finally, the unsatisfactory and dislocative process of applying for permission to institute general freight rate increases by Order of the Board of Transport Commissioners will be eliminated.

### **Maximum Rate Control: Trucks**

Maximum rate control could apply to the trucking industry if significant monopoly arose. The basic touchstone of significant monopoly is the lack of alternative carrier services. In trucking, unlike railways, this condition implies both collusion between firms and restraint of entry by provincial authorities.<sup>37</sup> The remedy for collusion is found in the law. The remedy for limited entry is regulatory relaxation.

To the extent that provincial authorities are concerned about excessive competition in commercial trucking, and restrain entry through franchise restrictions or by other means, the rationale and mechanics of maximum rate control are commended. Otherwise the trucking regulatory authority takes upon itself the difficult task of determining what the shippers of the province shall pay, the standards of service they shall accept, and thus the size and extent of resources the limited number of firms shall devote to road haulage. Should regulatory Boards misjudge any of these, private motor trucking will tend to supplant public carriage.

In an industry where competition is readily entertained, none of this is necessary. Regulatory control of highway transport is much more effective when concentrated upon safe operational and proper performance standards in keeping with the physical and climatic limitations of the highway network.

The complaint is made that too easy entry brings a continual arrival of new entrepreneurs who are not well informed about the profitability of trucking or about their own ability to make profits, and this keeps the industry in a constant state of depression. Attendant upon this, it is claimed, is the operation of badly maintained trucks, over-driven drivers, and unsatisfactory service, which reflects upon the whole industry. None of this can be denied, except perhaps in degree. The cure appears to lie in one of two directions: either control of entry and rates or the creation of lively and sympathetic highway traffic boards adequately supplied with the necessary data to examine and advise prospective entrants to the commercial trucking industry. If it appears to the public authorities that there are too many trucking companies and that this situation is chronic then the latter direction seems preferable. The necessary capital requirements for various types of operation can be explained. The necessity of adequate insurance, and bonding for the traffic they hope to handle can be set out. The typical rates in effect, and the volumes necessary at those rates to make an adequate return, are all demonstrable items. It is even possible to envisage

<sup>37</sup> If there is freedom of entry there is no point in collusion. If there is not freedom of entry, but more than one trucking firm, there is no reason (in the absence of collusion) why rates should not be competitive. A significant degree of monopoly in the trucking business suggests both collusion and lack of freedom of entry.

instructional courses in small business management, to whatever extent seems necessary. Thus equipped with knowledge and certified for operational competence, the entrepreneur is free to take his own risks. The growth of efficient and large trucking companies in Canada today is due far more to the entrepreneurial drive of individual firms than to restricted franchises. Restricting entry does not guarantee safe operating practices and roadworthy equipment. In the interests of public safety, regulation of this type on public highways is vital but separate. Concentration upon regulation of operations, with freedom of entry based upon knowledge, will promote the type of atomistic competition which brings adequate resources to bear in the provision of road transport at prices for service related to costs and normal returns to enterprise. Incentives to efficiency and the attendant returns are encouraged without the regulatory boards being responsible for any degree of monopoly profit.

## APPENDIX A

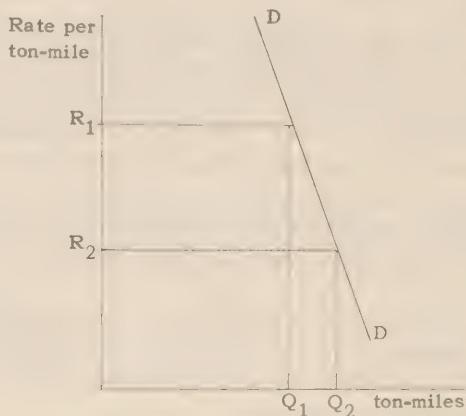
### The Demand Function

The "demand function" is simply a schedule of the number of ton-miles which will be demanded by the shipper at all possible rail rates.

Demand curves are usually downward sloping to the right (DD) as shown in Figure

1. At a price or rate  $R_1$ , the shipper will be willing to buy  $Q_1$  ton-miles. If the freight rate is lowered more ton-miles will be "consumed". The increase in the quantity of the railway services that will be demanded in response to lower price will come about for two reasons. In the first place, since transportation charges are a part of the total costs of the product a lowering of these charges may be presumed to lower the price of the final product and therefore increase its rate of consumption. In the second place, a lower freight rate will probably make it possible for the individual shipper to reach more distant markets. (Lower rates might also direct traffic from other modes but this aspect of the problem will be handled later.) Common sense tells us that the demand for the services of the railway for any one shipper will tend to be fairly steep (inelastic) indicating that quantities moved are not highly sensitive to small movements in rates. But it must be emphasized that this relationship between rates and shipments varies over time. In the very short run shipments may be expected to have little or no relation to the amount charged, but as more time elapses the shipper may make adjustments in markets and prices which will profoundly affect his use of rail services. Hence the slope of the demand curve will vary over time. The longer the period allowed for adjustment, the flatter it will become. Again, since the ratemaking must consider that some rates may have to apply for an appreciable time, it is the long-run demand curve in which he is interested.

Figure 1



### Competition and Monopoly

The degree of competition or monopoly which attaches to a product (or service) in the market place is influenced more than anything else by the number and closeness of substitute products offered to consumers. This point can be best demonstrated by an examination of two extreme examples. Let us suppose that there was only one salt mine in the world and only one salt-supplying company. For most of its uses there is no very satisfactory substitute for salt. For table use we would be prepared to pay a very high price. This implies that the demand curve for table salt is very nearly vertical, or to put the matter a little differently, the amount sold would be quite insensitive to the price. In this case we would have no trouble agreeing that the firm would have a very high degree of monopoly and that it could charge a very high price. Now let us assume that there are thousands of salt mines scattered around the world. Salt as a commodity is no less essential, but the output of any one firm is not the least essential since the salt of any other mine will serve in its stead. One mine owner would be virtually powerless to raise the price above the

market rate because if he did his customers would go elsewhere. In other words, his demand curve would be flat and we would say that the salt was sold in a market in which there was a very high degree of competition or a very low degree of monopoly.

Obviously the two cases we have been discussing are on the extremes. Most markets lie somewhere in between. It is therefore not useful to speak of monopoly and competition without qualification; one must instead recognize that there are varying degrees of monopoly.

To over-simplify a bit, it is customary to measure this degree of monopoly by the slope<sup>38</sup> of the demand curve.

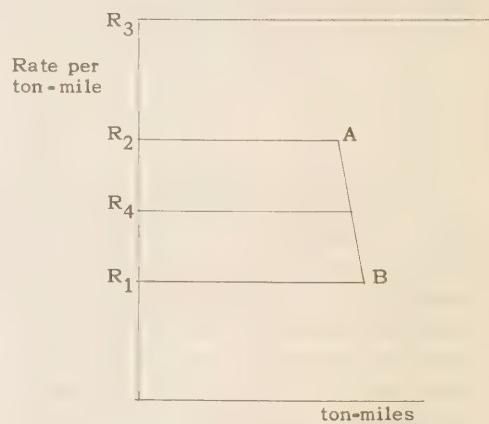
One may go one step further and ask what it is that determines the slope of the demand curve, i.e., what is the degree of monopoly facing the individual firm? From our previous example we can see that this is a function of the availability and closeness of substitutes. In a sense there is no product for which there is not a substitute since all must compete with each other for the consumer's or the businessman's dollar. Hence sellers of diamond necklaces must compete with sellers of mink coats. For some purposes, at least, these products may be very close substitutes. For other purposes a manufacturer of mink coats must compete with other manufacturers of mink coats, of other fur coats, and even of expensive cloth coats.

It is obviously the existence and closeness of substitutes which is at the root of competition and monopoly and which determines the shape of the demand curve. It follows from this that wherever we can measure or estimate the demand curve we can provide a reasonably objective measure of the degree of monopoly.

While the concept of the degree of monopoly which we have just outlined is useful in sharpening our thinking about the nature of monopoly we find that it is not directly applicable to the competition which exists among the various transportation media. The reason for this is that the demand curve for a particular commodity movement is not a smooth straight line as we indicated in Figure 1 but instead is sharply kinked. This kinked demand curve is represented for a typical movement in Figure 2.

$R_1$  represents the long-run marginal cost of the railway and therefore constitutes the long-run rate below which the railway would be unwilling to move the traffic.  $R_2$  represents the rate which would make it more attractive for the shipper to move his goods by truck or for trucks to establish a competing service where none exists. The railway therefore has some discretion in the choice of rates only between  $R_1$  and  $R_2$ . So long as marginal revenue remains positive, the profit maximizing ratemaking will set the rate as close to A as possible. But what is the slope of the point A? On the line segment  $R_2A$  it has a slope of zero which suggests a zero degree of monopoly. If on the other hand A is considered to be on line segment AB it has a steep slope which indicates a high degree of monopoly. Obviously a measure of monopoly is not of

Figure 2



<sup>38</sup> More precisely the measure of the degree of monopoly is generally taken as the reciprocal of the price elasticity of demand. Price elasticity is not quite the same as slope but is, like slope, a measure of the sensitivity of sales to changes in price.

much use if, for the same point, the degree of monopoly can at the same time be considered to be very high when considering downward adjustment in the rate and very low when considering upward movements in the rate. And point A is, in fact, relevant for rate regulation since it is likely to be one sought after by a profit maximizing rate setter.

The kinked or discontinuous demand curve for rail services, then, requires that we adopt a slightly different measure of the degree of monopoly. In order to find a more practical definition of the degree of monopoly we need only inquire what are the price and profit consequences of competition. If there are a large number of actual or potential firms willing and able to perform a particular service or supply a particular good the price established could not for very long be more than full cost plus the usual rate of profit. If the market price fell, profits would fall and some firms would leave the business and new firms would be discouraged from entering. On the other hand if prices and profits were high, existing firms would expand and new firms would be attracted. In our second salt example the easy entry of new firms into the business would discourage any firm from extracting more than the going rate of profit for to do so would simply speed the arrival of additional competition.

It follows from this that the relationship between price and costs will serve as a rational and objective measure of the degree of monopoly. Of course, in comparing the degree of monopoly among different products one would obviously need to examine the relative rather than the absolute spread between cost and price. Hence in the case of railway shipments the degree of monopoly for each could be measured by the difference between rate and cost divided by the cost. Alternatively the same effect could be obtained by expressing the rate as a percentage of cost.

In Figure 2 on page 60, two possible full costs are shown at levels  $R_3$  and  $R_4$ . If the full cost of the rail movement is  $R_3$  the degree of monopoly is obviously negative. In such a case the firm would be unable to recover its full costs from handling the business. If the capital equipment of the railway in the long run is divisible, and is capable of being withdrawn by the firm in small increments in the form of cash, the capital required for this particular movement would be withdrawn. If, on the other hand, the full cost is  $R_4$  and the firm charged  $R_2$  there would be some degree of monopoly. Again if entry into the transportation business were easy, if capital were mobile and divisible, a rate of  $R_2$  would encourage some other firm to come in and it would compete for the business so long as it promised more than normal profit. In other words, we should expect atomistic competition of this sort to bring the rate down to  $R_4$ . But where capital is indivisible, and is required in large amounts to be invested for a long period of time, these market forces will not operate effectively. Regardless of the success the railway achieves in meeting competition where it exists, the shipper whose demand for rail services is inelastic may require a significant degree of protection.



## RATIONALIZATION OF RAILWAY PLANT

The Commission's concept of rationalizing the railway plant is a dynamic one that envisages adaptive changes to meet new conditions as they arise. This involves the elimination of plant and services no longer needed and conversely the provision of new plant and services when they are needed. During this continuous process the rail management will, to a large degree, depend upon its ability to adjust railway plant and services to changes in demand.

In the first volume of our Report the problem of uneconomic passenger service was dealt with and recommendations were made to remove this burden from the freight shipper and to allow freedom to eliminate this unprofitable segment of their passenger business.

The problem of uneconomic branch lines was also dealt with in the first volume of the Report. It was pointed out that owing to the lack of expected development in certain areas and to the advent of competitive carriers, there was now a substantial mileage of uneconomic lines that put a burden on shippers. It was recommended that this burden be removed by the abandonment of the unprofitable lines. To avoid the disruption that such a programme could bring to labour, shippers, investment tied to rail, as well as individuals and communities affected, it was recommended that this programme be spread over a period of time. No time limit was set but the Commission expressed the view that the programme could be largely completed in fifteen years. To relieve other shippers of this burden during the adjustment period it was recommended that a sum, not exceeding \$13 million in any one year, be made available to compensate for losses actually sustained during this period.

In this chapter a plan is suggested for implementing these recommendations. An examination is also made of the problem of rail utilization in Canada in order to determine, insofar as possible, the kind of rail transportation that will be needed in the years ahead. This information is necessary so that a programme of plant reduction undertaken at this time will not interfere with the future rail transport requirements of the nation; and to devise policies that, insofar as possible, will allow the building of new rail lines and the providing of services that will not now or in the immediate future place a burden on shippers. The allegations that duplications of lines and services exist with the resultant increases in costs to both major railways is examined and related to the recommendations being made by the Commission. Finally, suggestions are appended to deal with the problem of investment tied to rail.

Before beginning a discussion of the above matters, the Commission wishes to state its views as to the responsibilities of the various participants in a rail rationalization programme. Government, rail companies, railway labour and the shipping public must work together and each discharge their responsibilities if Canada is to enjoy a fully efficient transport system.

In a rationalization programme the role of government is to encourage the most efficient allocation of transportation resources, first, by providing a regulatory environment that will allow

rail management the greatest possible freedom to adjust to changing conditions, consistent with the protection of the legitimate interests of the shippers. Secondly, it should encourage and assist, when necessary, rail companies in achieving their objectives.

Management of rail facilities is the responsibility of the rail company, be it privately or publicly owned. Within the framework of government regulations, management must be free to manage. The responsibility must be theirs to initiate the removal of unprofitable segments of their business, to streamline their operations, to reduce costs and to initiate new facilities to meet the shipping public. No one else can do this for them and no one else should try to do so. That management must do the managing is an elementary principle, the acceptance of which we believe is vital to the achievement of an efficient rail transport system in Canada.

The removal of rail lines will inevitably affect labour. It is believed that the gradual programme that has been suggested will enable labour, displaced in one segment of the business, to be largely absorbed into other more profitable segments. Despite this, there will inevitably be problems of relocation and some loss of jobs. Full and frank disclosure should help to allay fears which are often worse than the realities of the situation. Without minimizing the problems involved, the Commission is confident that enlightened railway and union management can solve them with a minimum of hardship. The objectives are similar in both — a profitable rail enterprise that can afford to pay reasonable wages. We believe that direct co-operation between the parties concerned is the most efficient method of arriving at lasting solutions to these problems. This is not to say that railway labour should be excluded from any plans the government may have to assist in the problems of technological unemployment and relocation of labour forces by retraining or other means. Nor is it suggested that special assistance in this field should not be made available if the parties concerned can demonstrate their need. But such relocational or other assistance should be recognized, known and earmarked separate from National Transportation Policy objectives.

It is of primary interest to the shipping public that rationalization promises to reduce rail costs. Shippers should realize that it is they who pay for loss operations and that their self-interest demands that they assist rather than hinder management's efforts to reduce the losses. In the process individual shippers may suffer inconveniences and perhaps even financial loss. This is part of the price that all must pay from time to time for the inevitable changes that must take place. No shipper should expect other shippers to subsidize his transportation bill.

Not only shippers, but many others will be affected, directly or indirectly, by the changes that must be brought about. It is believed, however, that the Commission's recommendations would give adequate protection to all from undue hardships during the transition period. Moreover, the degree of inconvenience and loss will be minimized if there is co-operation and understanding on the part of all those concerned with this problem.

#### Trends in Rail Utilization

It has been generally recognized that Canada has a very large network of railways in relation to the total amount of goods to be transported. The burden of this excess capacity has allowed the railways to realize fully the economies possible in rail transport. For many years the hope was maintained that with the expected increase in population and economic activity Canada would grow into her railways. It now seems more probable, as a result of uneven economic growth and the changing pattern of transportation, that excess plant will continue to exist in some areas and that new facilities will be required in others.

In order to examine the validity of these hypotheses, three studies were made:

1. Changes in railway utilization in the past thirty-five years in Canada.
2. The effect of the expected economic growth in Canada on rail transportation requirements.
3. The problem of the effect of technological changes in the transport industry and the relationship of these to rail plant requirements.

From these studies certain conclusions emerge and the implications of these on railway plant rationalization are discussed.

### Rail Utilization 1926 to 1959

Data were available from Canadian National Railways on gross ton-miles carried per mile of track by sub-divisions for various years from 1926 to 1959. These data were grouped into four periods, namely 1926 to 1935, 1936 to 1945, 1946 to 1955 and 1956 to 1959. For each period, information for the following years was obtained:

- 1926-1935 - each individual year
- 1936-1945 - 1936, 1937, 1940, 1941 and 1944
- 1946-1955 - 1947, 1948, 1950 and 1953
- 1956-1959 - 1956 and 1959.

The objective of the grouping was to minimize the influence of individual years by averaging.

Only data for lines in use over the whole period were used. The lines were divided into main and branch. The objective was to compare growth of through movements with growth of gathering and distribution. Any such division is to some extent arbitrary since there is no precise definition of branch line as contrasted with main line. In a general way main lines are those that carry through traffic between relatively large centres whereas branch lines are appendages to the main lines, leaving it at some point and ending at a small community, or joining a second main line. To make this division, the Commission relied on the judgement of men having a detailed knowledge of the system. No doubt other experts might make some changes but it is believed that such changes would be minor and that the division that was made is useful for the purpose for which it was intended. By their very nature, most branch lines carry small tonnages and most main lines large tonnages.

Tonnages carried by main and branch lines were averaged by subdivisions and finally regions.

A summary of the results obtained is presented in Table III and calculations made from the data in this table are tabulated on page 66. The results show a total increase in tonnage carried from 1926-35 to 1956-59 of 36 billion gross ton-miles. Significantly, of this amount 35 billion gross ton-miles accrued on the main lines and only 1 billion on the branch lines. The branch lines are carrying a smaller percentage of the total tonnage today than they were thirty years ago.

Main line tonnages increased relatively more in the Atlantic and Western regions than in the Central region. This may be due to the earlier and greater impact of truck competition in the Central region. Least improvement in branch line tonnage occurred in the Western region and most in the Maritime region. This would suggest that in relation to the traffic available, the greatest excess of railway plant occurs in the Western region.

TABLE III  
TONNAGES MOVING OVER MAIN AND BRANCH LINES OF CANADIAN NATIONAL RAILWAYS  
BY REGIONS, 1926-59, IN GROSS TON-MILES<sup>1</sup>

Region and period	Branch lines		Main lines		All lines	
	Average <sup>2</sup> ('000)	Total (millions)	Average <sup>2</sup> ('000)	Total (millions)	Average <sup>2</sup> ('000)	Total (millions)
<b>ATLANTIC<sup>3</sup></b>	<b>1,579 miles</b>		<b>1,580 miles</b>		<b>3,159 miles</b>	
1926-35	176	278	2,341	3,699	1,259	3,977
1936-45	288	455	4,289	6,776	2,289	7,231
1946-55	427	674	5,705	9,014	3,067	9,688
1956-59	449	710	6,689	10,569	3,570	11,279
<b>CENTRAL</b>	<b>1,877 miles</b>		<b>5,595 miles</b>		<b>7,472 miles</b>	
1926-35	300	562	3,970	22,212	3,048	22,774
1936-45	361	678	4,162	23,287	3,207	23,965
1946-55	475	892	5,894	32,977	4,533	33,869
1956-59	443	831	6,063	33,924	4,651	34,755
<b>WESTERN</b>	<b>5,275 miles</b>		<b>5,950 miles</b>		<b>11,225 miles</b>	
1926-35	263	1,385	2,619	15,584	1,512	16,969
1936-45	300	1,582	2,994	17,817	1,728	19,399
1946-55	395	2,083	4,233	25,187	2,429	27,270
1956-59	379	1,999	5,445	32,396	3,064	34,395
<b>TOTAL</b>	<b>8,731 miles</b>		<b>13,125 miles</b>		<b>21,856 miles</b>	
1926-35	289	2,526	3,162	41,495	2,014	44,021
1936-45	311	2,714	3,648	47,880	2,315	50,594
1946-55	418	3,648	5,118	67,178	3,241	70,826
1956-59	405	3,539	5,858	76,889	3,680	80,428

<sup>1</sup> Only lines that were in existence for the entire period were used.

<sup>2</sup> Average is per mile of track.

<sup>3</sup> Excludes Newfoundland.

Summarizing from Table III, we find that branch line mileage is a substantial part of total rail mileage in each region:

Atlantic region	50 per cent
Central "	25 " "
Western "	47 " "
System Total	40 percent

Yet the branch line contribution to total ton-mile traffic has been small:

1926-35	5.7 per cent
1936-45	5.3 " "
1946-55	5.1 " "
1956-59	4.4 " "

The share of branch line to total traffic declined from 5.7 to 4.4 per cent, or by almost a quarter, from 1926-35 to 1956-59.

As pointed out, the above data are from Canadian National Railways. Similar information was not available from Canadian Pacific Railway, but CPR data were obtained for the years 1931, 1948 and 1954. An examination of this material showed no evidence of a pattern different from that found on Canadian National lines.

A comparison was made of the tonnage carried on lines in 1931 with that carried in 1954 on both railways. A summary of the results is presented in Table IV.

TABLE IV  
A COMPARISON OF THE TONNAGE CARRIED  
ON RAILWAY LINES IN 1931 AND 1954

Tonnage carried in 1931			Tonnage carried in 1954					
NTM per MT <sup>1</sup>	Miles	Per cent of total mileage	Less than 1931		Same as 1931		Greater than 1931	
			Miles	Per cent	Miles	Per cent	Miles	Per cent
<b>Canadian National Lines</b>								
0— 249 .	9,653	45.9	0	—	7,296	75.6	2,357	24.4
250— 499 .	2,005	9.5	426	21.2	486	24.2	1,093	54.6
500—1,999 .	6,892	32.7	654	9.5	2,210	32.1	4,028	58.4
2,000+ .....	2,498	11.9	377	15.1	497	19.9	1,624	65.0
<b>Canadian Pacific Lines</b>								
0— 249 .	7,230	45.2	0	—	5,975	82.6	1,255	17.4
250— 499 .	2,277	14.2	506	22.2	564	24.8	1,207	53.0
500—1,999 .	4,212	26.4	405	9.6	412	9.8	3,395	80.6
2,000+ .....	2,265	14.2	42	1.8	108	4.8	2,115	93.4

<sup>1</sup>Net ton-miles per mile of track in thousands.

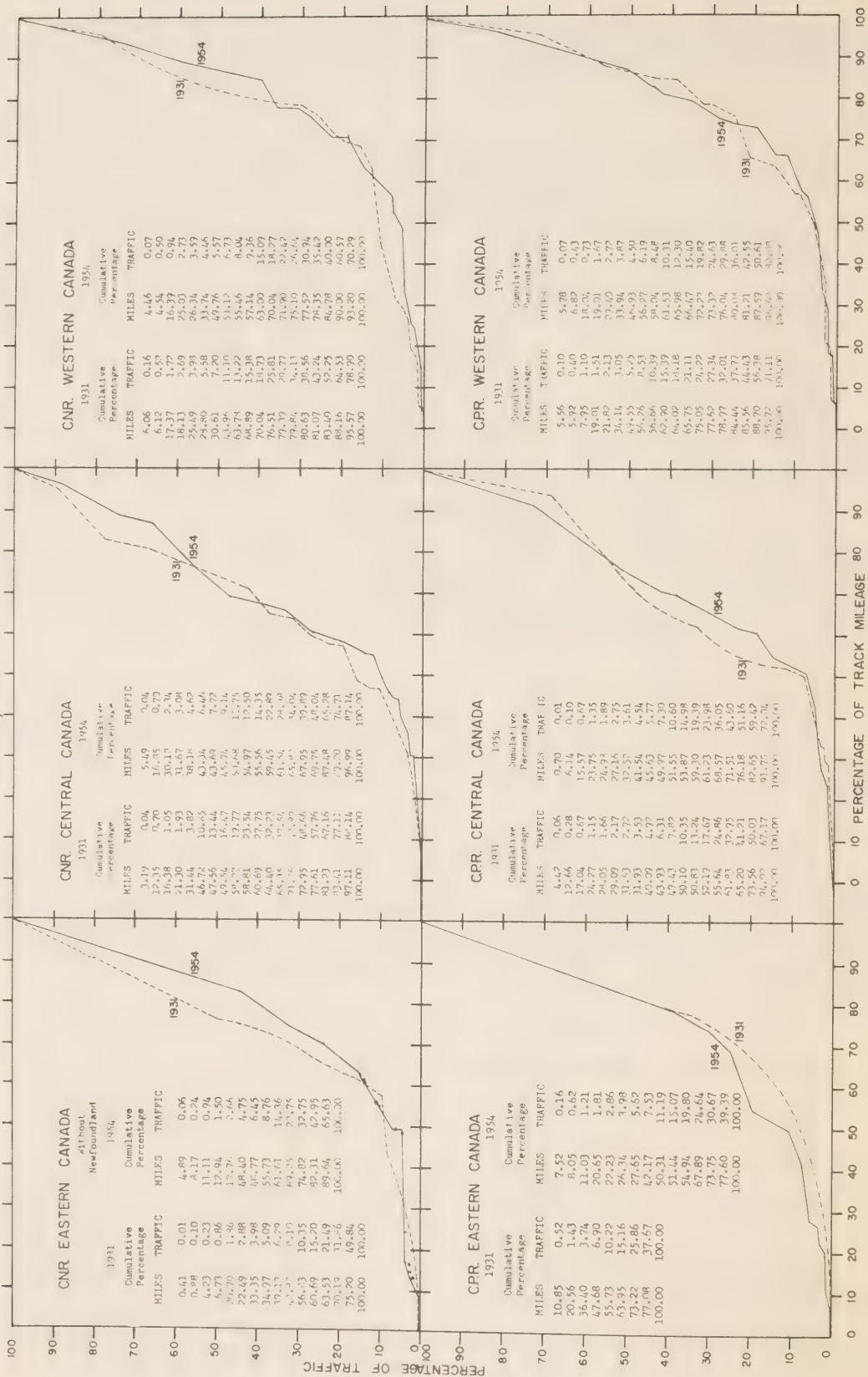
These results show clearly that on both railways those lines that carried little tonnage in 1931, when railway construction virtually halted, were for the most part carrying little in 1954, while those carrying high tonnage in 1931 were carrying even greater amounts in 1954.

This relationship is also demonstrated graphically in Figure 3. This figure shows comparatively for 1931 and 1954, by regions for each major railway, the density-mileage distribution of traffic by cumulative percentages, based on more detailed density intervals than could be shown in Table IV. It will be noted that a very large amount of railway plant on both railways and in all regions was used to move a very small percentage of the traffic in 1931. In 1954 the situation had not changed materially.

The conclusions to be drawn from this study are:

1. There has been a substantial increase in demand for rail transportation during the period under review. Measuring this demand in gross ton-miles it has amounted to 35 billion on main lines and 1 billion on branch lines.
2. There is a large part of the branch line mileage which, due to the resource base of the area, alternate nearby rail facilities or the substitution of other modes of transport, contributes little to total tonnage moved, and has failed to show significant improvement in this regard in the last thirty years. These branch lines occur in all regions of Canada but the greater mileage occurs in the Western region.
3. In the future, the transportation needs of most areas now served by these lines can best be met by trucks, integrated where necessary with other nearby rail lines.

FIGURE 3  
CUMULATIVE PERCENTAGE DISTRIBUTION OF MILEAGE BY FREIGHT TONNAGE BY REGIONS, CNR AND CPR



### **Future Needs for Rail Transport**

Additional requirements for all types of transportation will increase as the country continues to develop. In Canada the increase in economic activity during the next ten to fifteen years is likely to be very considerable providing:

1. That high levels of employment are maintained in Canada and in the industrial countries with which we trade.
2. That no major wars occur during the considered period.
3. That Canada's major exports are not unduly affected by increases in trade barriers.

In considering the effects of an increase in economic activity on rail transport both the industries and the regions that are involved have significance. The railways may reasonably expect to transport the entire increase in the production of certain industries, to share in others, or to receive no benefits from still others, depending upon their competitive position vis-à-vis other forms of transport. Similarly, the railways are likely to obtain a greater share of the traffic, to require more facilities and to make greater profits on long-haul rather than on short-haul movements.

It should also be noted that increases in total economic activity are partly a reflection of increased activity in the service industries. These are not large users of rail transport.

The Commission made no special studies of the economic growth prospects of Canada. The information available from the Royal Commission on Canada's Economic Prospects, modified in some cases by our economic consultants in the light of more recent information, was used to indicate the trends that might be expected. These trends, rather than the precise amount of growth expected, were examined in relation to future rail requirements.

In the agricultural industry, grain for export will decrease in relative importance and may decrease absolutely as compared with the last ten years. Livestock products will likely show a marked increase and most of this increase will occur in the Prairie Provinces. Other agricultural products will increase in close relation to population increases. It appears likely that there will be a continuing trend to process foods near production points and ship only the finished products to market. For example, more dressed meat and fewer live animals will require transportation, and similarly more prepared and frozen foods and less raw products will be transported. The extent to which this is done will depend on the relative costs of transportation, technological developments and other factors. On balance it would seem that the railways will become of lesser rather than greater importance in transporting the products of the agricultural industry. They may gain some tonnage of long-haul processed products but gathering and distributing will more and more fall to truck transport. A good example is the meat industry. Truck transport, due to the many advantages it offers to shippers, has largely replaced rail in many areas for transporting live cattle from farm to packing plant. More surprising, it now competes strongly in moving dressed meats over the long haul from the packing plants of Western Canada to the wholesaler and retailer in Central Canada.<sup>39</sup>

In the mining industry it seems probable that substantial increases in production will be achieved during the period under review. Canada has abundant mineral resources and world demand can be expected to increase almost constantly. Only excessive costs of production or the creation of trading barriers will prevent this sector of the Canadian economy from expanding at a steady rate. Traditionally, producers of minerals have been users of rail transport and the same should be true in the future. This should result in large tonnage for many existing lines and will

<sup>39</sup> *Truck-Rail Competition in Canada*, by D.W. Carr & Associates, to be published in Volume III of this Report.

inevitably result in the building of substantial mileage of new lines. Providing that realistic appraisals are made of tonnage and rates so as to properly reflect estimated costs, these new lines should produce profitable business for the railways.

Economic activity in the forest product industries will continue to increase. In the production of lumber the increase is likely to be moderate. However, the demand for rail transport in this sector may be greater than the increase in production because of the greater interregional movement of this commodity, particularly from British Columbia to Central Canada. The extent of the increased movement by rail will depend upon the ability of the lumber producer to deliver the product at prices competitive with other building materials. The pulp and paper industry should enjoy a marked and continuous growth. This should occur in all sections of Canada, but the relative increases will be particularly noticeable in the Atlantic Provinces and in Western Canada. Rail transportation should share in this expansion but water and truck competition will limit the tonnage that the railways can hope to acquire.

Manufacturing will likely increase at a greater rate than population growth. It would appear that under the existing economic climate in Canada the tendency towards a variation in growth between regions will continue and unless government policies are introduced to favour decentralization, a large share of the new manufacturing plants will probably locate along the St. Lawrence Seaway with the possibility of a lesser concentration along the West Coast. This increase in production of the manufacturing industry will require additional transportation in the movement of necessary raw materials as well as the finished product, but these movements will be highly competitive, with water and truck transport each getting a large portion. It seems unlikely that the rail share will increase over what it presently enjoys and may even suffer a decline.<sup>40</sup>

Because of the concentration of manufacturing and to a lesser extent mining and pulp and paper production in Ontario and Quebec, it can be expected that a substantial part of the increased economic activity will occur in these Provinces. To a large extent British Columbia will share in the increased activity. While growth will occur in the Prairie and Atlantic Provinces, this will likely be relatively less as compared with the rest of Canada. Since the railways' chief advantages are in long-haul, heavy-loading commodities, this pattern of economic growth will probably result in them having a smaller percentage of the total traffic even though their tonnage will increase in absolute terms.

### **Technological Changes**

No one can foresee what technological changes will occur in the future. All one can do is observe what has happened in recent times and the direction in which changes are occurring.

Introduction of diesel locomotives and improved signal systems has markedly increased the efficiency of high-density, main-line hauls but has not noticeably improved gathering and distributing on low-density branch lines. In the future the "automated" train is a probability. This is now technically possible but the cost of equipping a line for this type of operation is very considerable. Certainly such developments are only possible on the high-density lines.

Similarly, the use of piggyback, and more recently containers, again favour the main-line haul by rail and the gathering and distributing by truck. The improvement in trucks and roads has made this integrated mode of transport a very efficient method of retailing transportation. These improvements are likely to continue at an accelerated rate.

<sup>40</sup> *Ibid.*

The evidence available points to continued improvement of rail efficiency on high-density operations and little improvement on low-density lines. In this area of gathering and distributing it is evident that transportation needs can best be met by truck transport.

### **Summary**

Despite a marked increase in population and a great increase in economic activity in Canada during the last thirty years, the branch lines of Canadian railways are not hauling appreciably more goods now than they were at the beginning of this period. The increase in economic activity that may be expected for the future is not likely to change the situation. For the most part, the demand will be for main-line rather than branch-line hauling. Branches when required will usually be for specific industries having to move large tonnages that require little terminal handling. Insofar as it can be seen, increases in transportation efficiency will be most noticeable on high-density movements and there is no evidence to indicate that this increase in efficiency can be carried over to low-density line operations.

### **The Mechanics of Rationalizing Railway Plant**

The purpose of this section is to present an administrative plan for implementing the recommendation made in Volume I on rationalizing railway plant. This recommendation was "that, under the administration of the Board of Transport Commissioners for Canada, an annual grant of \$13 million be made available to the railway to provide compensation for losses actually incurred in the operation of lines which the railways are prepared to abandon, but which shall be continued for a period of time to be determined by the Board".

The purpose of the recommendation is to encourage the railways to pursue a course of plant rationalization and to lift from the shippers the burden which they presently must carry because of the continued existence of basically uneconomic miles of track.

Most, but not all, light-density branch lines are uneconomic and place a burden on shippers. The exceptions are those that are profitable because of the traffic that they feed to the system, those that have potential profitability, and those that cause losses but are needed for operational purposes.

The remainder, those that are part of the system and which cause losses, are a burden on shippers. These should be discontinued or the burden should be removed in some other way. The railway has the detailed information to show whether specific rail lines are uneconomic, are potentially profitable, or are justified by the system needs.

Before abandonment of trackage is allowed, sufficient time must be given for the adjustment of the shipping pattern and of investment along the line. The time required can only be determined by a study of the individual case.

The immediate need is to release the railways and railway shippers generally from the burden of uneconomic lines. The long-run need is to adjust the railway plant in accordance with traffic demands.

The following conditions are suggested as a guide to accomplishing both short-run and long-run aims.

1. The programme requires acknowledgement by the railways, and by public and administrative authorities, that railway rationalization is necessary and desirable in the interests of

efficient transportation. In the free enterprise environment it cannot be expected that the costs of transportation shall normally be borne by others than the users. Where insufficient use is made of any service, it must, by market criteria, disappear.

2. Recognition by the railways and general public that investment was undertaken and tied to railway service in good faith, in part because in the Canadian environment railway lines were traditionally regarded as permanent installations. Change is necessarily painful but is the price of a dynamic economy and efficient operation. Society can soften the impact of change by slowing it – even where it is overdue.
3. Graduating the process of change calls for an assessment of the time necessary to effect it. The assessment is properly made through the process of a public hearing.
4. Where it is evident that substantial abandonment must take place the over-all timing and progress of rationalization should be made known to those affected. As a general condition such substantial abandonment should not occur less than five years from the date of application. Exceptions may occur when it can be shown that shipping and investment tied to rail have already been abandoned. Where a number of lines in a district are candidates for abandonment they should be thinned out in stages to give opportunity for reassessment of the remaining lines at each stage.
5. A Branch Line Rationalization Fund shall be set up, from which the Board of Transport Commissioners will be authorized to pay annually losses actually incurred on uneconomic branch lines. The subsidies paid in any one year shall not exceed \$13 million which will be the annual allotment to the Fund from the consolidated revenues of Canada. The Fund will be established for a period of fifteen years. As the two systems get nearer and nearer to operating only paying portions of lines the total subsidy will tend to disappear.
6. The Board will have discretion to apportion the Fund to branch lines between the two railway systems. It will not necessarily be equally divided. As the abandonment date is reached and the subsidy thus expires the set sum involved in that line will become available for application to subsequent candidates for abandonment.
7. Holding the total to a specified sum will help to keep the speed of abandonment reasonable, make the railways choose their worst lines first and allow the National Treasury to budget with some accuracy. The Board will authorize payment from the Fund annually and pro-rate it up to the permissive rate of abandonment upon annual proof of loss.

These conditions can be fulfilled by the following suggested procedure:

1. Upon acceptance by the Parliament of Canada of a policy permitting compensation for losses on branch lines pending abandonment, the Board of Transport Commissioners should indicate to the railway companies the period in which applications for abandonment will be received, after which no further applications will be considered until the Board so directs.<sup>41</sup>
2. In conformity with such procedures as the Board may establish a railway company shall apply to the Board for leave to abandon a line, supporting the application inter alia with a statement showing the system net loss for which the line is responsible. After verification of this amount, the Board shall authorize full payment of the loss out of the Branch Line Rationalization Fund in all cases where abandonment is not allowed within three months of date on which application for abandonment is made. This payment shall continue in respect of a line until the date of abandonment ordered on the basis of annually proven losses. Once the limit of the fund is reached in any year payments in respect of other lines shall be made as funds are released and shall commence from that date, not retroactively.

<sup>41</sup> This does not prevent applications for abandonment for which no compensation is to be received. See p. 73 of this chapter.

3. Payments made on behalf of losses incurred shall be published annually and posted in all stations on the lines so affected by the railways and published in the local newspapers by the Board.
4. At an appropriate time the Board shall on its own motion or on the request of shippers using the line make a full announcement in all communities concerned of the dates the public hearings will be held to determine the effective date of abandonment. It is recommended that sufficient time be allowed for the parties concerned to file statements with the Board on their position, and for the Board to request additional information respecting the nature and condition of investment to be affected by abandonment. Normally, considerable time will elapse between the date of application and the effective date of abandonment. But this should not delay the date of hearing and the decision since adjustment of investment will take time.
5. Following the hearing in each case the Board will either:
  - (a) set and publicize the date of abandonment to all parties and communities concerned. The factors to be considered in fixing a date of abandonment should include the condition of the line, the effect on investment tied to rail, the alternative services available and such other matters as affect a reasonably and orderly transition to other transportation facilities and such other matters as in the judgement of the Board are pertinent.
  - or (b) IN EXCEPTIONAL CIRCUMSTANCES, order continuation of the line indefinitely. These exceptional circumstances would arise only when, in the Board's view, no reasonable alternative transportation is then available nor could be made available in the foreseeable future with the result that abandoning the line would subject a substantial number of people to undue hardship. Should the Board find such action necessary, it will, prior to making a public announcement, report the decision fully, with all supporting evidence to the Minister of Transport who shall have the responsibility of confirming the decision or returning the case to the Board for review. This measure is intended to keep this type of decision in a most exceptional category in order that it shall not become a means of perpetuating uneconomic lines. The Board shall review all such lines at least every five years to see whether or not conditions have altered so that a date of abandonment may be set and act accordingly.

The intention of the rationalization scheme is that once a line is presented for abandonment it shall remain in service at no burden to shippers and no profit to the railway until and only until the date of abandonment announced by the Board. If experience has shown the railway to have erred and the line is to be retained for a further period, it remains as a purely business venture, and all investments by the railway and the non-rail community exist by purely commercial principles. The nation has then no further transportation obligation in the revived line. No future assistance will be allowed. It may subsequently be abandoned at any time by application to the Board.

The Commission wishes to emphasize that nothing in the procedure outlined for the abandonment of unprofitable lines should in any way inhibit railways from seeking to abandon profitable parts of their system should they desire to do so. It may well be that the detailed net revenue position could be improved by this means where essentially duplicate facilities exist. In these circumstances the railway concerned would apply to the Board with supporting evidence for the desired change. If affected shippers contest the application, the Board must rule on the basis of criteria similar to those used for other abandonments.

### Provision of New Rail Facilities

As has been indicated previously, Canada will continue to require new rail lines. The expected economic developments, particularly in mineral and forest products, will require the transportation of large tonnages at low cost. Rail transport will play a vital role in these developments. Such developments will be of great benefit to Canada and should at the same time improve the financial position of the railways.

Parliament should assure itself that any proposal for a new line is economically sound before approving it. The Commission notes that this has in recent years been the policy that Parliament has followed. We heartily approve this procedure. This is not to say that Parliament should not under certain circumstances authorize construction of lines for developmental purposes when the immediate revenue cannot be expected to meet all costs. Under these circumstances, the Government should be prepared to meet the deficit from public funds and not place the burden on other shippers. We have earlier recommended that the burden of existing uneconomic lines be removed from the shipper. Consequently, we cannot do otherwise than state that new lines should not become a burden. However it is unlikely that the building of any substantial number of developmental lines will be required in the future. In general it may well be that the provision of road or air transport as the initial transport in new areas is the best procedure to follow.

The Commission has no need to make specific recommendations on building new rail facilities. Each such facility will require the approval of Parliament and at that time Parliament will have an opportunity to assure itself that the scheme is economically sound.

### Duplication of Plant and Services

Some witnesses appearing before us believed that the possibility at least existed of making substantial savings by eliminating duplications and by generally greater co-operation between the two major railways. The main argument of the proponents of railway nationalization is that substantial savings could be made by the unification of the two systems.

That wasteful competition, duplication and lack of co-operation is a major fault of Canadian railways is not a new accusation. The Duff Commission rightly deplored the conditions that it found in 1930. The invasion of territory by competing branch lines and the "red thread of extravagance" that ran through the operations were said by that Commission to be a major reason for the financial difficulties of the railways. These conditions, superimposed on the over-building of main lines in an earlier era, were being brought to the attention of the nation with new force at a time of serious depression. These matters are still of great concern to the general public of Canada and for that reason a brief review of events since the time of the Duff Commission may be of interest.

As a result of the recommendations of the Duff Commission, Parliament passed the Canadian National-Canadian Pacific Act.<sup>42</sup> In a sentence, this Act exhorts the railways to eliminate wasteful competition and unnecessary duplication of plants and services. An arbitration mechanism was provided to settle issues that could not be agreed upon by the two railways.

Initially, progress was made. Many passenger trains in the Toronto-Ottawa-Montreal area were pooled and some agreements on the abandonment of unnecessary branch lines were arrived

<sup>42</sup> Chapt. 39, George V, 1932-33.

at and carried out. However, the savings were much smaller than anticipated and the financial difficulties of the railways continued. The workings of the CN-CP Act were examined by a Senate Committee "appointed to enquire into and report upon the best measures of relieving the country from the extremely serious railway condition and financial burden consequent thereto".<sup>43</sup> The Committee heard extensive evidence including that of the then president of the CPR, Sir Edward Beatty, and his plan for unification or amalgamation of the two railway systems. In its Report of May, 1939, the Committee rejected Beatty's plan of unification and stated that under a policy of forced co-operation, annual savings of 10 to 15 million dollars might be effected. They strongly recommended that a more serious attempt should be made by the railways to give effect to the letter and spirit of the CN-CP Act. The Committee concluded that it was not advisable to modify the terms of the Act until its possibilities were more thoroughly ascertained.

During the war, the enforcement of the CN-CP Act took second place to other far more urgent tasks.

The subject was raised in the first post-war general rate case by counsel for the Province of Saskatchewan. It was argued that the railways should be required to show that they had carried out all co-operative measures, plans and arrangements possible to effect economies, as directed by the Act before any increase in freight rates was allowed. The Board ruled that the CN-CP Act does not confer upon the Board any duty or authority to require the railways to study and undertake co-operative measures with a view to effecting economies, or to review and investigate what measures the railways have taken or might have taken under the Act. The Board said that this is not a matter which would seem to invite any special inquiry on their part.<sup>44</sup>

The Turgeon Commission<sup>45</sup> heard extensive evidence regarding the CN-CP Act. Among the conclusions it arrived at were the following:

1. The Act was passed to effect economies in railway operations during the depression and to improve railway revenues. Its primary purpose was not to lower rates.
2. At the time of enactment, economic conditions and the tactics of the two railways fully justified the legislation.
3. The results achieved under the Act have been twofold:
  - (a) economies have resulted which exceeded \$4 million a year in the 1930's;
  - (b) the railways have been deterred from damaging and wasteful competition.
4. The possibilities of making further economies are restricted by the growth which has taken place in the volume of traffic but the importance of preventing extravagant competition remains.
5. Under present conditions, shippers have a direct interest in the economies in railway operation which they did not have in the 1930's. At that time it was not possible to increase rates, whereas in later years an attempt was made to pass higher operating costs on to the shippers by means of increased rates.
6. The proposal that the Board, in revenue cases, should require the railways to show that they had neglected no possible economies under the Act seems unworkable.
7. The Act has served a useful purpose.

<sup>43</sup> Senate Committee on Railways, 1938 and 1939, King's Printer, Ottawa.

<sup>44</sup> Twenty-one per cent case 1948 (Vol. 38J.O.R.R. No. IA). This was confirmed in the 8 per cent interim increase case 1949 (Vol. 39J.O.R.R. 13A).

<sup>45</sup> Report of the Royal Commission on Transportation, 1951, Ottawa, King's Printer.

The Turgeon Commission recommended that the Act be continued but be amended so as to provide that the annual report submitted to Parliament by the Directors of the CNR should contain a separate section giving the results achieved and the plans being studied during the current year.

Although this recommendation has technically been carried out, it is not readily apparent that it has contributed significantly toward accelerating the activities of the railways under the Act. Moreover, the recommendation of the Turgeon Commission in 1951, that a joint programme must be undertaken by the two railways to achieve added operating economies, does not appear to have had very notable results. Evidence presented to us by the railways stated that since 1950 there have been no programmes completed under the terms of this Act.

To say that no programmes have been completed under the terms of the Act is not, however, to say that no progress has been made toward the achievement of economies through co-operative measures. Several joint switching and trackage arrangements have been established in various parts of Canada. A joint committee of the car departments of the two railways has set up joint specifications for nine separate types of railway cars. In the communication field, joint microwave systems, telex networks, facsimile systems and jointly operated branch offices have been established. Considerable attention has been given by the joint committee to the problem of passenger services but as yet concrete results are few. A similar situation prevails with regard to the possible elimination of uneconomic branch lines.

It is apparent that during the last ten years at least, whatever co-operation the railways have felt desirable in their operations, they have been able to carry out without the benefit of this legislation. Nor has labour had any benefit from the Act.

It is the recommendation of this Commission that the CN-CP Act should be repealed. To the extent that the problems it was designed to deal with still exist, they must be tackled in another way. Where research and operational co-operation is mutually advantageous in facing competition it is strongly to be encouraged but it is our conclusion that the impact of new technology and the arrival of effective competition calls for the primary efforts of each railway to be concentrated within its own organization to effect economies.

As mentioned earlier, allegations of duplication and wasteful competition were made to this Commission. We have not considered making a detailed study of the amount of duplication that now exists nor any estimate of savings that might be made by its elimination. Setting out the details of the nature and extent of wasteful duplication, would not alter the basic consideration — that responsibility for taking action remains with the railways. This has been demonstrated from the time the Duff Commission reported. Railway management must eliminate wasteful investment or bear the penalty.

The Commission is of the opinion that the greater part of the problem will be met by the implementation of its recommendations respecting the elimination of unprofitable passenger services and branch lines.

## APPENDIX A

### **Some Considerations of the Impact of Abandonment on Investment Tied to Rail Transport**

Along most rail lines in Canada there are factories, warehouses, mills and other structures whose operations have been geared to rail transportation for the receiving or shipping of the goods they handle. The fact that some of these lines have become uneconomic from the railway company's position does not mean that they may not still be vital to the existence of the rail-tied investment. When it is found necessary to abandon the trackage a considerable hardship may be imposed upon the owners of such property. The situation receives its grim irony from the fact that the unprofitable nature of the rail line has likely developed through no fault of this investment.

Where alternate forms of transport are readily available, no loss or inconvenience results but where no other transport is available relocation or the abandonment of the investment is necessary. To a considerable extent the impact can be lessened by allowing time for adjustment, but in spite of this, in some cases, serious loss and inconvenience may still result.

The types and amounts of investment so affected cannot be known and will not be discovered until abandonment procedure begins. But general knowledge can serve to illustrate the type of business which will be most affected, and the greater incidence of the businesses affected in one part of the nation over another does not make it any less a national problem.

The pattern of historical development and the location of the particular resources in Canada has created one major industry whose activities are essentially tied to rail movement. Grain-handling facilities exists on all lines in the Prairie Provinces. As grain cannot normally be economically moved from one country elevator to another or from a country to an export terminal by truck the loss of a rail line results in the loss of the grain facilities associated with it. In most cases, only salvage value remains as these facilities cannot be moved to new locations.

From the standpoint of the entire grain industry more is involved than the abandonment of existing facilities. The grain must still be handled, and as a result additional facilities will have to be built on adjacent lines. The loss of existing facilities plus the necessity of providing new ones may place an undue strain on the finances of many grain-handling companies.

In the grain-handling business another problem (unrelated to transportation) has arisen. The rising costs that have been experienced in recent years have made the operation of a small country grain elevator very expensive. There is a need to replace the small houses with larger ones. Our information<sup>46</sup> shows that:

1. Maintenance per thousand bushels for elevators of a capacity of 75,000 bushels or over, is 68 per cent less than the costs for elevators of under 40,000 bushel capacity.
2. Operating costs per thousand bushels of capacity are reduced by approximately one-half in the larger elevators as compared with those under 40,000 bushels of capacity.
3. Replacement costs of larger capacity elevators are approximately 39 per cent less per thousand bushel capacity than for the smaller elevators.

<sup>46</sup> The information used in this Appendix was derived from an extensive study of grain-handling facilities undertaken for the Commission by the grain-handling organizations themselves. Almost complete data were obtained for about 55 per cent of the total grain-handling capacity, not including terminal elevators. For the remaining capacity the information was less complete, but the statistics were sufficiently comparable to give support to the averages derived.

4. In addition to the reduction in direct cost, it seems reasonable to expect that those costs which are of a corporate administrative nature and not directly allocatable to individual elevators and locations would decrease with the reduction in the number of elevators. We are unable to say what this reduction might be but it is not likely that it will be nearly as great as the reductions evidenced above.

The situation which will face the grain industry, particularly in Western Canada, by a programme of rail-line abandonment was quickly obvious to us in our investigations. Moreover, although our Terms of Reference are not so broad that we have responsibilities to recommend policies for individual industries, the results of our studies concerning the impact of abandonment on this industry led us to certain conclusions, which are offered in this Appendix, to ease the transition period in rail transportation. We wish to emphasize that we have used the grain-handling industry as an example only. What is presented for one industry may well be accepted for any that fitted the similar situation anywhere in Canada.

The question of whether or not a large-scale effort to consolidate grain-handling facilities is desirable at this time was not studied by the Commission. However, where adjustments are forced upon the industry by rail abandonments, it would seem highly appropriate to replace elevators with the larger, more economical elevators now being developed.

The use of tax incentives to produce, hold, or change the desired patterns of investment has come into wide use in recent years. These devices have been used in practically every country in the world in one form or another. Canada has at different times made use of various forms of incentives, among the most widely known of which are:

1. Exemptions applicable to mining companies such as a three year exemption from income tax on profits commencing with the beginning of commercial production and liberal allowances regarding the deductibility of developmental expenditures.
2. Additional or accelerated allowances for defence production on certain classes of assets where such allowance is approved by the Minister of Defence Production.
3. Capital cost allowances increased by virtue of the Canadian Vessel Construction Assistance Act 1952 to 33 1/3 per cent of cost on a straight line basis from 15 per cent on a declining balance basis.
4. The Coal Production Assistance Act increasing capital cost allowance to 30 per cent plus the additional deduction of amounts repaid on a loan made to a coal producer for the purpose of carrying out the project as determined and approved by the Dominion Coal Board.
5. Amendments to the income tax regulations in 1961<sup>47</sup> provided for accelerated depreciation, apportioned over the first three years at the option of the taxpayer, in respect to investment expenditures incurred to assist:
  - (a) New industries in areas where there is a substantial degree of continuous unemployment.
  - (b) The development of new products from processing operations not hitherto carried out in Canada.
  - (c) The production of new types of goods.

The foregoing are a selection of a number of statutes designed to stimulate investment or improve the position of an industry through the use of tax incentives, or both. These statutes

<sup>47</sup> P.C. 1961-326, March 3, 1961.

provide an illustration of how the Income Tax Act can be used effectively to give the stimulus needed in certain industries without generally disrupting the provisions and purposes of the Act.

In the light of the foregoing the following suggestions are submitted for consideration as a means of giving incentives to a particular example of rail-tied investment in order to bring about changes in the pattern of their present and future investment necessitated by rail branch line abandonments. A company with investment tied to rail might when the rail line is abandoned be offered one or more of the following concessions:

1. Increased depreciation rates on new country elevators which are a consolidation of existing facilities and which have a handling and storage capacity over a fixed minimum number of bushels to be determined by negotiations between the grain-handling companies and the delegated administrative authority referred to below.
2. Removal of present requirements regarding a reduction (by the amount of the recaptured depreciation on elevators sold) in the assets pool, provided the cash received is invested within a limited period of time in new country elevators having a capacity in excess of the minimum number of bushels.
3. Allowing the cost of country elevator facilities abandoned or the loss on facilities sold to be written off as soon as possible with no restrictions on the carry forward of such loss.
4. Permitting an investment allowance, calculated as a per cent of cost, as an expense in the year of acquisition or construction of the asset which would not be subject to recapture on disposal of the facilities, provided such facilities were held for a reasonable length of time and are a consolidation of existing storage capacity. This would be an alternative to 1. above.

An agency such as the Board of Grain Commissioners or such other body as the Government may see fit, could be made responsible for the planning, administration and control of the programme designed to consolidate the existing grain storage and handling capacity to provide a more economic and practical system in conjunction with the possible changes in over-all rail transportation network that this Commission has recommended. A most important task of the designated agency would be the control and prevention of over-capacity that might possibly result from adoption of a system of incentives to change the extant patterns of investment.

The above suggestions have been made with particular regard to the grain-handling industry. Any policy adopted to give assistance to this industry could be applied with modifications to other industries affected in the same way by rail plant rationalization. The over-all increase in efficiency, both rail and non-rail, which a relocation policy would assist, will enhance the growth of real production in the nation. Proper tax incentives do not, in the long run, impoverish the national treasury.



## THE NATIONAL TRANSPORTATION POLICY AND EFFECTIVE REGULATION

The National Transportation Policy in the competitive environment calls for the performance of two functions by government. The first is the regulatory function, now being carried out in Canada by a growing number of agencies made necessary by the emergence of new forms of transportation. The second function is positive, or promotional, having to do with policies pertaining to public investment and co-ordination between modes in the interests of developing adequate and efficient transportation services. The performance of both functions is necessary to the successful achievement of National Transportation Policy objectives.

Considering first the regulation of transport, it is apparent that the emergence of competition is changing the nature of the regulatory function. The trend towards emphasis on costs of movement is evident with the growth of competition. The older rate structure with primary emphasis on "value of service" is becoming more and more subordinate in all modes as a basis of making rates. For a number of years such rates will probably continue to be a reference point, a benchmark from which to work in establishing rates of movements of particular commodities between particular points. But the practical search for profitable traffic will cast each rate so established into the balance, to be measured by the costs associated with performance of the service, and the similar costs of real or potential competitors.

More and more rates will appear which do not offer a price for a given qualified service on a "take it or leave it" basis. The recognition that all modes have a degree of flexibility in the services they can offer to a given movement will bring about a range of prices tied to levels of service, measured, at least relatively, in terms of the additional costs of extra service. Recognizing this, and the range of service each mode of transport can efficiently perform, rates will be offered which leave to the shipper a choice of low cost, low service transport, or higher cost, higher service movement.

Public policy, as embodied in the National Transportation Policy, cannot lag behind the changes that are occurring. Insofar as the public and the carriers themselves require decisions and control from policy-making and regulatory authorities, they require that these decisions be rational and be made from knowledge and perception at least as sharp as any to be found in the transportation industry, and with a perspective which is wider than the self interest of any individual firm. If the organization of regulatory bodies, and the tools made available, prevent perceptive leadership in knowledge, or inhibit regulation from keeping abreast, the regulatory agencies fall into the grave danger of being subject to the industry they are expected to regulate, and of becoming the citadel of the *status quo*.

Naturally, the actions of these regulatory agencies affect the positive or promotional side of transport policy. In spite of careful attempts to remain free of responsibility for any part of industry location and resource allocation, the very act of making a decision has its repercussions on other modes of transport and beyond the transport industry. The various agencies are not to be condemned for this inevitable effect upon policy. Because of the high degree of specialization needed in each agency to comprehend the facts and understand the problems and the trends of

technological and institutional change, these agencies will, perforce, have to continue to meet the problems associated with the various segments of transportation in relative isolation. It is enough to expect each agency to meet the pressing current regulatory responsibilities over the whole field of operations, standards, entry controls, rate regulation and the multifarious other problems of which only a specialized agency can even be made aware, without requiring them at the same time to be cognizant of their orders on every other segment of transportation.

Regulatory boards and agencies cannot and should not attempt to fulfil the positive or promotional aspects of transportation policy. The specific powers assigned to them by their respective Acts become, quite properly, the bounds of their responsibilities. Including in those Acts any responsibility for policy initiation is fraught with difficulty and with the danger of conflict. Under the press of daily regulation, changes in regulation, the hearing of complaints and the implementation of their orders, any conscious assessment of the indirect impact of their work upon other forms of transport is bound to receive scant attention.

Over the past thirty years, in Canada and in other countries, there have been many recommendations for the centralizing of regulation in transport. Insofar as the "negative" or strictly regulatory function is concerned, we are convinced it would accomplish very little. Such a central authority would have to be so large that the division of labour necessary would follow the lines of agencies already in existence. In Canada the division of constitutional responsibility for highway transport makes central regulation more complex.

#### **Transportation Advisory Council**

Turning now to the positive or promotional role of the Government in transportation policy we find that there exists nowhere below the Cabinet level in Canada any organization or advisory body sufficiently broadly based to undertake the task of continually developing goals for National Transportation Policy or a broad outline of measures to achieve them. The significance of this deficiency in the changing transportation environment has been examined in Chapter 2 and subsequent chapters of this volume.

To cover this gap, to create this structure for positive policy in transportation as a whole, we recommend the creation of a national Transportation Advisory Council. Freed of regulatory responsibility and able to judge and assess the impact and effect of the decisions of all transport regulatory agencies, and empowered to confer and consult with all interested parties (the regulating and the regulated) at all levels of government, this Council can recommend broad policy through the Minister of Transport.

There is particular need of such a body in those aspects of transportation where our responsibilities have directed us. The reality of competition, and the degree to which public investment is responsible for it, encourages us to recommend strongly that explicit recognition be given to the dual nature and purpose of public responsibility in transportation. We have recommended in Volume I considerable public action to rectify the legacies of national policy where we have found them to be inequitable upon one mode of transport. Repairing that deficiency in policy will not permanently settle the problems of a dynamic industry. Unco-ordinated public investment, without clear-cut policy objectives and without some unifying research group constantly assessing the effects of regulation on National Transportation Policy and to recommend necessary changes in policy and regulatory legislation, leaves open the possibility and probability that changing circumstances will create future misallocations of resources in transportation, and consequently in the whole economy.

The national Transportation Advisory Council, properly constructed and free of departmental administration and responsibilities, will be in a position to study the current disposition and future needs of public investment in transportation facilities, to consult with all levels of government respecting their intentions in the light of constitutional responsibilities for investment in transportation facilities, to receive the representations of interested groups, to recommend upon priorities for public investment, to test the allocation of investment funds needed in the light of the pattern of user charges, and to make recommendations on the adequacy of user charges and the effects of taxation to the Federal Government in order that costs may be borne on a rational and equitable scale throughout the country for all modes of carriage.

Such a body, composed of persons knowledgeable in transportation and investment, finds its public justification on two counts. The first is that investment patterns and the life of investment made in the various modes of transport are dissimilar between the modes of transport and in various climatic regions of the country. The second justification for the body is the constitutional dichotomy in responsibilities for transportation in Canada and the changes in these responsibilities that new technology introduces. Provincial governments each have equal constitutional responsibilities to provide highways but the conditions under which they must build them, and the fiscal capacities from which the investment must be extracted, are very different. On the other hand, in addition to substantial control of railways and pipelines, the Federal Government has accepted responsibility for navigational and terminal facilities to a greater or lesser degree for both air and water transport, as well as some highway assistance. Yet there is little evidence of any large measure of co-ordination in the decisions respecting public investment in the various modes of transport.

The nature of the task of this Transportation Advisory Council would be, in the first instance, to make a short-term historical assessment of investment in all modes of transport and attempt to make a clear-cut appraisal of the objectives and disposition of the investment and, in the second instance, to keep current a body of fact available to all levels of government respecting that investment which is being undertaken across the nation including the extent to which user charges are offsetting the real social and economic costs. Finally, the experience and judgement of the Council would be called forward in the submission of policy recommendations for investment and appropriate user charges at all levels of public control in the various modes of transport associated with the use of the facilities. Since this is in construction a federal agency responsible to the appropriate Minister, the disposition of federal monies unilaterally or in co-ordination with provincial governments, can be advised upon in such a way that a positive approach to a national policy of public transportation investment and appropriate user charges can be evolved.

But the functions of the proposed Transportation Advisory Council should go beyond the investment sphere. Being a representative non-regulatory body of a continuing nature it can play a role for which there has always been a need in Canada: a forum for the discussion of transportation problems. Such cannot properly be considered by a regulatory body which has judicial duties. In the past, problems and suggestions have either lacked a suitable forum or they have had to be dealt with — once they had become sufficiently numerous and pressing — by the appointment of Royal Commissions.

During the next few years it is probable that substantial changes will take place in the transportation industry and particularly in the rate structure. As is evident from our Report, these changes will require considerable re-thinking of time-hallowed concepts. It would be too much to ask that this mental adaption to the new world in transportation can be accomplished by a complete reliance on regulatory procedures. Nor is it entirely satisfactory to continue the traditional method of waiting until general dissatisfaction with conditions makes it imperative to undertake a special industry.

While much can be accomplished by such periodic special inquiries, they have inherent limitations. Our own investigations have demonstrated to us the wisdom of providing a continuing opportunity for review. We received many suggestions which have been most useful to us in making our recommendations. But we also received many complaints on which it was impossible for us to comment in this Report. Due to the nature of a Royal Commission inquiry, evidence had to be concluded at a definite point in time and there is little opportunity now for a continuing process of discussion and evaluation.

In our opinion, the Transportation Advisory Council could provide this opportunity on such a continuing basis and with much less sense of the extraordinary and also less formality than unavoidably attend an investigation conducted by Royal Commission. We are convinced that this type of discussion will prove to be of benefit to shippers, the transportation industry and those responsible for making recommendations on governmental policy.

#### **Organization and Structure**

The organization and structure of the Council cannot be spelled out by this Report in all the necessary details. Our conclusions have forced upon us the necessity of the existence of such a body; they have not indicated to us its singular composition.

The nature of its tasks appears to recommend that it be composed of persons vitally interested in the achievement of efficiency in transportation, chosen not so much with a view to giving representation to individual industries or geographical regions as to bringing the informed layman's mind to bear on a field which so often tends to become overgrown with the tangle of technical preconceptions.

The Council should be safeguarded from those institutional rigidities inherent in any human organization which, without specific measures to offset them, may give rise to vested interests in policies brought into being because of its own recommendations. The appointments to the Council should permit the services of the Members to be rendered on a part-time basis. Appointments, in the first instance, for varying terms will ensure a gradual succession of personnel. So composed, we confidently anticipate a Council able to adopt new attitudes and approaches to keep its awareness of changing conditions in line with the objectives of the National Transportation Policy. Adequately supported by the whole range of information and knowledge which liaison, experience and good research can provide, a body of laymen interested in the problems of a dynamic transportation system, and appreciative of the role transportation is expected to play in Canadian life, can do much to chart a course for policy and advise upon its incidence.

The structure of the research and administrative establishment to aid and assist the Council in its work should be such that the Council is free to use the research facilities of federal and provincial regulatory and administrative agencies, the resources of industry, and the services of professional research. In addition, the structure of the Council should ensure that it is sufficiently independent so research work necessary for policy considerations may be conducted under the mere direct surveillance of the Members. This may mean that the Council's own research staff and facilities may not be large, but it would be necessary that there be some professional and technical assistance for consideration of day-to-day problems that arise and for drawing together the longer-run appraisals.

In addition to the research facilities it will be necessary that there be an adequately staffed secretariat. The close relationship of this Council to government at all levels, to industry and the interested public, will prove to be an important ingredient in the process of policy assessment and in recommendations for change. Furthermore, there will be important research documentation and

cataloguing necessary in conjunction with the recommendations we shall make later in this chapter<sup>48</sup> respecting co-ordination and integration of transportation research in the nation. This implies that both the secretarial and research staffs of the Council shall work in co-operation with the federal Department of Transport and the Counterparts in provincial governmental structures.

The general terms of reference under which the Council shall operate should not be construed to mean that it be equipped or prepared to perform research, administrative, or operational functions of, or for, other agencies of government. Each of these regulatory or administrative or operational agencies functions under statutory authority in specific areas and must be encouraged to continue to do so with full responsibility. But forces beyond those enclosed by statutory responsibility may seek to utilize the Council in ways which will prove deleterious to its purposes, to other agencies, and to achieving the objectives of National Transportation Policy. Thus it will be necessary that the Transport Act, or other statutory vehicles, carrying the terms of reference of the Council, shall set out the objectives of National Transportation Policy in clear terms and charge the Council with specific responsibilities in that regard. As experience is gained, and as conditions change, the Council should be permitted to recommend to the Minister of Transport changes in its own terms of reference, having regard to the regulatory, administrative, and operational responsibilities of the relevant Departments and Boards. The Council should make an annual public report of its activities to the Minister of Transport, and such other interim report as may be required by him.

In large measure, if the objectives of National Transportation Policy are to be achieved, there must be major reassessments made of the role of the specialized regulatory, administrative and operational agencies. Therefore, since one of the chief means of attaining the objectives of National Transportation Policy is the formation of the Transportation Advisory Council, we recommend that the Council shall recommend to the Minister, from time to time, such redefinitions of powers and responsibilities for transportation administration and regulation as appear consistent with the attainment of the objectives of the National Transportation Policy for all agencies falling within the responsibilities of the federal authority.

### **Transportation Statistics**

Regulatory agencies and policy advisory groups wherever found, are helpless without the necessary facts and figures upon which to make assessments. The usefulness and applicability of the wide range of the currently produced data on various aspects of transport and the suitability of each series we prefer to leave to the professional judgement of competent statisticians. However, we do feel compelled to make some general comments and conclusions respecting these essential statistical tools.

It is apparent that transportation data falls into three categories. The first is the data collected for publication. The second is the data concerning transportation costs and relevant traffic information needed by regulatory bodies. The third is the material necessary for management use, which is only indirectly of concern to the public authorities. To treat these three categories of data, there are two general rules which should govern their collection and processing.

One general rule is that all transportation data which are to be made public should be published under the authority of the Dominion Bureau of Statistics, which shall bear responsibility

<sup>48</sup> Page 88.

for it. We are guided in making this recommendation by the principle that accuracy, relevance, innovation, objectivity, comparability and competence are furthered when the work is the responsibility of statisticians whose purpose is the production of the data, not their use.

The other general rule which should guide, but not limit, the gathering of the first two types of data is that they should be adapted insofar as possible to the series needed for management purposes. Such consideration will appreciably encourage the co-operation of transportation companies and cut their real costs of data collection.

Some statistical series become outdated with technological change. There are many different measures of output and efficiency in the transport industry and such statistics are easily misused. Constant review of suitability, and an explanation of uses and limitations of statistics of output and of technical and economic efficiency, could most usefully be included in the text of statistical periodicals containing the data. For these reasons we recommend that the whole broad scope of public statistics on transportation now being produced by any federal agency shall be subject to scrutiny by a Transportation Statistics Committee headed by the Dominion Statistician or his appointee, with a view to developing an adequate and integrated programme of transportation statistics. Representation on the Committee should be confined to one member from each of the regulatory agencies dealing with any aspect of transportation, with the power to call on and consult with representatives of other governmental or commercial organizations on particular matters. The Committee should make interim and progress reports to the Minister of Transport, the chairman or chiefs of all regulatory agencies and boards, and the Transportation Advisory Council, together with recommendations for change.

As a point of departure for the Transportation Statistics Committee we offer some specific recommendations as a result of our consideration of the special study on transport statistics which appears in the third volume of the Report,<sup>49</sup> and is commended for detailed study.

We recommend, first that a Canadian Industrial Freight Traffic Survey be inaugurated. The necessary frequency of the Survey is a matter for determination by statisticians in the light of interim sampling and special surveys. This technique commends itself to us as being the best method of determining freight transportation patterns and changes in patterns as inter-modal transportation grows. Furthermore, it circumvents many of the practical problems associated with gathering information from numerous small firms engaged in trucking and, possibly, air and water transport. Comparability and continuity would be facilitated. The public information resulting would be invaluable to carriers, shipper associations, regulatory bodies and the national Transportation Advisory Council.

Pending the establishment of other gathering procedures, the Waybill Analysis now conducted by the Board of Transport Commissioners will need to be continued. It may prove to have justification along with other procedures. In the interim before any final decision can be taken, it is apparent that the Waybill Analysis needs to be enlarged. We are unable to say how large a sample should be used as a basis for the Analysis, but it appears obvious from the advice we have received that a universal one per cent sample is inadequate where the sample yields an absolute carload figure too small to give statistical confidence. It may well be that varying percentages depending upon the region or the interregional movements involved can be used. Furthermore the use of individual commodity surveys, such as the railway are familiar with, may be incorporated to supplement, or complement, the Waybill Analysis.

<sup>49</sup> *Review of Federal Transportation Statistics*, by D. Eldon, to be published in Volume III of this Report.

The greatest shortcomings of the present Waybill Analysis are that it covers only one mode of transport, the railways, and the regional breakdown no longer accurately reflects the regional structure of the railways. Changes to correct these may or may not be easy but are well worth prompt consideration by the recommended Transportation Statistics Committee.

It is possible that the rapidity of change taking place in passenger travel may make special surveys the only practical means of measuring change. Passenger travel information is, moreover, of less use in regulatory work, but of great importance in planning highway and airport investment. Suitable area surveys at the necessary intervals should not prove unduly onerous or expensive and, when supplemented by information already being gathered by provinces, or travel and carrier associations, should be sufficient. However, as a first step, considerable improvement could be effected by co-ordinating and consolidating all the current passenger statistics for assessment of their utility.

There are several other proposals upon which we do not feel specific recommendations can be made without further consideration. These we commend to the Transportation Statistics Committee, as they are found in the special study published in Volume III. Included among them are considerations of data on certain specialized functions of transport which because they are almost an integral part of the industry's output may require special treatment. Pipeline transport is one, and the movement of milk, household furnishings, automobiles, livestock, and the activities of freight forwarders are others. Warehousing or storage may also logically be part of the transportation function in certain instances. For any, or all of these, or others, the publication of special statistical series may provide important knowledge of the transport function in the economy, and be usefully embraced in a comprehensive coverage of transportation statistics.

We recommend that the Committee give consideration to the advisability of composing a statistical series of Indexes of Freight Rates. Pricing of transport service is extremely important and this is one of the few fields where no comprehensive price statistics exist. Once the Canadian Industrial Freight Traffic Survey exists, the material for constructing Indexes of Freight Rates will be available.

A deficiency in statistical collection which is particularly noticeable concerns the important dimension of speed of service. This, in the competitive era, is of extreme importance to shippers and a factor influencing the price they are willing to pay for service. Suitable series to integrate this aspect of transport by introducing the time-distance factor would be a most useful addition to knowledge for carriers, regulatory agencies and the shipping public.

Finally, amongst these special categories commended for study to the Transportation Statistics Committee, we strongly urge the creation of series showing the size and nature of public grants to transportation. Clear differentiation needs to be made to separate those payments which are subsidies to forms of transportation from those payments made to industries to assist them to move goods.

Considerable information is now available on subsidies to railways and railway shippers. Statistics of direct and indirect subsidies by governments to other forms of transport should be published. Sufficient information should be developed on traffic flows of commercial trucks and private motor vehicles and passengers to permit better studies of the extent to which different types of highway traffic either are subsidized or pay their share of road costs through taxes and fees to government. Also, it would be valuable to develop statistics showing the extent to which publicly provided services utilized by all other modes of transport are subsidized.

Since a subsidized carrier has an advantage in competition with other carriers, there is a cost in terms of efficiency when transportation subsidies encourage traffic to move through channels it would not otherwise use. In view of the importance of handling traffic wherever possible by the most efficient means, the public should know the extent of subsidies to different media of transport and to specific companies. The importance of this knowledge for National Transportation Policy objectives is evident. It is vital to the work of the national Transportation Advisory Council, which should be consulted in setting up the necessary statistical series on transportation subsidies.

As a result of the extra work load that the Transportation Section of the Dominion Bureau of Statistics must assume, it will be necessary to see that adequate staff and equipment are made available to discharge its responsibilities efficiently.

### **Publication of Studies**

From time to time, the raw data collected and processed by the Dominion Bureau of Statistics or regulatory agencies will be used in special transportation studies. Much useful information is, even now, available through studies of this nature, and every effort to encourage such work will be adequately repaid in increased understanding. Many of these studies are excellent in quality and could, with little modification, be useful additions to knowledge of transport for the interested public. It is recommended that the national Transportation Advisory Council shall be the repository of copies of all of these, done by whatever public agency, with a view to publication. Centralizing the studies, the Council can determine the nature of transportation research or research respecting transport, and perform a useful function for itself and the concerned public by co-ordination and consultation respecting proposed projects. The Council, thereby, becomes a research clearing-house, a knowledgeable guide to research sources. It will contribute to its own primary aim by drawing upon the considerable but fragmented research now being conducted in many government departments, trade associations, universities and other research establishments, and by encouragement and advice on needed studies.

### **Regulatory Agencies and Cost Data Analysis**

Under the regulatory requirements of a transportation environment characterized by both satisfactory competition and significant monopoly, regulatory agencies will of necessity direct their efforts more toward ascertainment of costs of movement. In line with advancing techniques of cost analysis being developed in the various segments of the industry the requisite skills must be developed to make rapid and confident verification of costs available in the regulatory process. For railways in particular the Board of Transport Commissioners will be called upon to arbitrate in the process of branch line contraction. In this procedure accurate assessment of losses arising from the operation of branch lines will become a heavy responsibility. This assessment again has to deal with costs, and a whole body of cost criteria will need to be established as a framework within which branch line losses can be calculated. This function, plus that of establishing cost criteria for maximum and minimum rate control as recommended in this Report, makes it essential that the Board of Transport Commissioners have adequate cost analysis facilities. Therefore, we recommend that additional staff and facilities be made available to the Board of Transport Commissioners to enable it to create an adequate costing section to meet the enlarged tasks which face the Board in the future.

The object of these recommendations is to attempt to facilitate the work of the Board, which is bound to take on new aspects under the impact of the competitive environment. It is our conviction that, as railway-highway competition grows in intensity, the work of the Board of Transport

Commissioners will change, and the efficient performance of the whole transportation function in Canada will be affected by the degree to which the Board is given authority to meet the changes by developing the statistics, the staff and the standards they find to be necessary.

### **Regulatory Agencies and Enabling Legislation**

A dynamic economy requires a certain degree of initiative and freedom for those agencies which bear regulatory responsibilities. The necessary freedom and initiative can only be sustained by careful periodic review of the statutes giving the terms of reference within which regulatory boards must work, and which delegate the necessary authority to them.

The evidence we have heard, the studies we have conducted and the analysis we have made all confirm the presence of a dynamic transportation environment. Greater flexibility must attend its regulation, and clear-cut powers and responsibilities must continue to guide the particular transportation regulatory agencies.

The Acts which cover those areas of transportation where our investigations lay are chiefly the Railway Act and the Transport Act. Both of these deal almost entirely with aspects of railway regulation. Both will require careful and extensive revision in the light of changing circumstances and particularly in the light of policy changes undertaken to adjust to the loss of the monopoly position of railways in overland transportation. Both Acts may still be necessary to cover the wide scope of railway regulation in Canada but the mould in which they are now cast will hardly fit the circumstances of the National Transportation Policy as set out in this Report.

Therefore we recommend, upon adoption in principle of the new policy, that these Acts, and such others as may be relevant, shall be subjected to thorough scrutiny by a committee of representatives of the regulatory agencies concerned, the Department of Transport and the Department of Justice. The committee shall work under the guidance of a memorandum from the Governor in Council which shall specify the components of the National Transportation Policy necessary to meet the rapidly changing circumstances in Canadian transportation.



## **PART II**

### **NATIONAL POLICY AND TRANSPORTATION**



## TRANSPORTATION IN NATIONAL POLICY

National Transportation Policy is that particular component of the total National Policy which is concerned with the effective use of transportation resources in Canada. Its primary function is to ensure that the transport system provides the comprehensive service which is economically adequate for the transportation needs of the country as a whole. In the first volume of our Report we expressed the general view that the attainment of this kind of a transportation system required the implementation of a national transportation policy which would open to each of the various modes the opportunity to fill its appropriate role within the new competitive environment; we have also put forward a number of specific proposals which, we believe, are necessary to achieve this end.

We recognize that this approach to the problem — that the principal concern of national transportation policy today should be with ways and means of achieving the most efficient transport system to serve the needs of the economy — may be a departure from the traditional view. Historically, the transportation system in Canada was used so extensively as an instrument for the pursuit of broad national policy objectives that the character of the system as a system tended to become a matter of secondary concern. As a result, national transportation policy has often been a great deal more preoccupied with the question of how effectively the transport system was functioning as an instrument to fulfil national policy objectives, than with the question of how well it was functioning as an economic enterprise. There were, of course, good reasons in the past why this was so. It is our view, however, that there are now equally good reasons why it should no longer be so.

This conclusion, a central theme of this Report, does not disregard the use of transportation as an instrument of national policy. Rather it conveys that, for transportation as an instrument of national policy to be most salutary for Canada in the future, its adaptation to the exigencies of the new competitive environment will warrant more consideration than may have seemed necessary in the past.

The implications of this are examined in the remaining chapters of this Report. First, to provide a background, we review the development of national policy in this context. We then take up several regional and industry problems which, because public policy has traditionally attempted to solve them by transportation means, have recommended themselves to us as important examples illustrative of the adaptations that may be necessary to maximize the coincidence of national policy with national transportation policy.

### Transportation as an Instrument of National Policy

The primary objective of national policy in Canada has always been to preserve and enhance the political and economic welfare of the Canadian people. While many and varied means have been used in the pursuit of this objective — a circumstance which reflects the number and diversity of the obstacles which have been encountered through time — experience has proven the use of the means of transport to be of singular importance to its attainment. In particular, the development of suitable transportation facilities has been instrumental in overcoming such formidable obstacles to

national development as those associated with great distance and rugged terrain, sparse population, scattered resource location, dependence on export markets and, most significant of all, the strong political and economic attraction exerted by the United States of America.

It was the essential importance of transportation in the early Canadian environment which made it inevitable that efforts should be made by government authorities to mould the system in the interests of broad national policy objectives. As a consequence, public concern with transportation issues has been a traditional feature of the Canadian scene and government action has played an important part in determining the nature of the transport facilities to be provided, their location, and the scope of the services to be performed. Furthermore, the high degree of risk associated with developing virtually uninhabited territory, the magnitude of the works involved, and a chronic shortage of private capital has made the provision of large-scale public assistance necessary in order to forge, as and when required, the transportation links which national policy deemed imperative. Thus, a large measure of government subsidization, regulation and even operation of transport has been a continuing feature of this country's national policy — a fact of Canadian life that is reflected in a heavy public burden of transportation costs which, until World War II, averaged about one-third of the Federal Budget. In the following paragraphs, we will examine some of the more significant examples of the pervasive influence which national policy has had on the evolution of Canada's transportation system.

It is a matter of historical record that the abundance of natural waterways in North America assisted greatly in the early explorations of the interior of the continent. It was to be expected, therefore, that following this period of discovery and with the establishment of permanent settlements in what is now the eastern part of Canada and the United States, transportation by water would become the basis of the primary system of communication and trade which developed in that area. In the Canadian colonies, attempts to improve conditions of navigation in the natural waterways, particularly on the main artery provided by the Great Lakes — St. Lawrence system, began as soon as settlement moved inland. Some of these pioneer efforts in canal building and other aids to navigation demonstrated great initiative and involved considerable expense, both on the part of public and private enterprise, but the financial resources of the colonies were not sufficient to embark upon works of the necessary magnitude to successfully overcome the many impediments to shipping which existed on the St. Lawrence River. However, with the union of the provinces of Upper and Lower Canada in 1841 the financial base required for such undertakings came into being and an active public building policy was put into operation that, within ten years, resulted in the completion of a series of canals on the St. Lawrence which provided a minimum nine-foot channel from Montreal to Kingston. Navigation further inland was improved in 1845 with the construction of the Welland Canal system of nine-foot locks linking Lake Ontario and Lake Erie. Finally in 1855, an American canal built at Sault Ste. Marie gave access to Lake Superior and a system of transportation became established which enabled medium-sized ships of that day to obtain 2,300 miles of passage from the Atlantic Ocean through to the head of the lakes. By 1895 the construction of a canal north of the border at Sault Ste. Marie was completed, fulfilling the Dominion Government's desire for an all-Canadian water route.

Confederation of the four provinces in 1867 made possible the construction of additional large-scale and expensive public works which were designed to further improve water transportation facilities on the Great Lakes — St. Lawrence system. Deepening of the entire chain of connecting canals to a minimum of fourteen feet was accomplished by the end of the century, a task which involved the outlay of some \$100 million over a period of thirty years on the part of the Federal Government. Initially, an attempt was made to recover some of these expenditures through the levying of tolls but this policy was suspended in 1903.

Undoubtedly, during this early period of the nation's growth the government's policy of substantial financial contributions for improvement of the means of transportation by water from the Atlantic to the Lakehead made an important and necessary contribution to Canada's political and economic unity. It was, however, soon recognized that water transport could only provide a limited solution to the nation's over-all transportation problems and, in the last half of the nineteenth century, public attention turned increasingly towards a new mode — the railway — as the principal transportation instrument for the achievement of national policy objectives.

The development of suitable means of carriage overland by rail was of particularly great importance to countries such as Canada where climatic conditions rendered even the most elaborate system of water transportation virtually useless during the winter months. Public authorities, therefore, were prepared from an early date to offer assistance to private interests in the construction of railway lines — with a view, of course, to adapting them, where necessary, to the requirements of national policy. In the 1850's the construction of the Grand Trunk Railway network connecting Upper and Lower Canada, although essentially a private venture, was assisted in no small degree both by government-guaranteed railway bonds and by public subsidies amounting to about one-third of the cost of construction. One of the principal objectives of the Grand Trunk Railway, like that of the canal system, was to provide a means whereby the resource wealth of the vast North American hinterland could be induced to flow through the provinces of Upper and Lower Canada rather than be directed below the border through the United States. Although it, too, failed in large part to achieve this national purpose, it nevertheless did help to offset what would otherwise have been an irresistible pull southwards, and thus enabled Canada to obtain a reasonably appropriate share of the rapidly expanding east-west movement of trade and commerce.

After the mid-nineteenth century, with the growing enthusiasm for political union of those territories comprising British North America, the planning and construction of railways began to assume a dominant role in public policy. The building of the Intercolonial Railway at government expense became a condition of entry to Confederation for the Maritime Provinces and national policy was further reflected in the circuitous, all-Canadian route, well to the north of the United States border, which was followed by the line. To round out the union in the face of growing United States interest in the Western Territories required a promise by the government to see that a railway to the Pacific would be constructed — designed not only to link British Columbia with the Confederation but also to make possible the settlement and development of the Prairies. The policies of the Federal Government, employing the techniques of land grants and outright financial aid, were ultimately successful in encouraging private railway interests to participate in "the race to the Pacific" and with the completion of the Canadian Pacific Railway less than twenty years after Confederation the initial objective of national transportation policy — an all-Canadian, all-weather route from the Atlantic to the Pacific — had been achieved. Notwithstanding the heavy burden of debt which was thereby placed upon the nation's economy, it is very doubtful if, without the successful execution of the Federal Government's transportation policies relating to Confederation, a sufficiently firm foundation would have been established to permit the development of a viable Canadian union.

The very obvious contribution which had been made to Canada's political and economic welfare by the first transcontinental rail connection emboldened government and private enterprise alike to think in terms of additional railway links between east and west. Among other considerations on the part of government was, of course, the belief that competition to the Canadian Pacific would help to lower and equalize rail rates throughout the nation. Provincial Governments, as well as the Federal, soon became heavily involved in the railway boom which swept the country in the early years of the twentieth century. High hopes raised by general prosperity and the economic expansion engendered by the settlement of the West were responsible for the construction of two more privately-owned transcontinental lines, the Canadian Northern and Grand Trunk Pacific

Systems, and by 1914 Canada had more miles of railway per capita than any country in the world. The amount of public and private borrowing involved in the execution of these undertakings was, of course, immense for a country in such an early stage of development but it was rationalized at the time by the widely held belief that the growth of the country's economy would be sufficiently rapid to cope with any future problem of railway debt. Events, however, proved this optimism to be excessive and within a few years it was apparent that a serious situation existed with respect to excess railway capacity. Bankruptcy and liquidation of private railway companies became a familiar occurrence during and immediately following World War I and between 1918 and 1923 the Federal Government, in order to protect the country's credit and maintain vital services to a national structure which had become heavily dependent upon railway transportation, was obliged to take over the Canadian Northern and Grand Trunk Systems along with other bankrupt lines and merge them into the publicly-owned Canadian National Railways. Since that time, therefore, it has been a direct responsibility of the Federal Government in the interests of national policy to assume the very large financial obligations, both public and private, which were associated with the construction and maintenance of this particular railway system.

Participation by public authorities in the actual building of Canada's railway system was only one aspect of the National Policy as it pertained to rail transportation. Governmental influence was also pervasive in the development of the freight rate structure, particularly with respect to the movement of traffic in the Maritimes and on the Prairies. Rates on the government-owned Intercolonial line serving the Atlantic area were kept at an artificially low level prior to World War I in order to fulfil certain Confederation pledges which were intended to give Maritimes' producers more favourable access to the markets of Central Canada; and, as a result, the chronic deficits which were incurred on the line's operations became accepted as obligations to be met by the Federal Government. For a period of time during and after World War I the rate advantages enjoyed by Maritime shippers became less significant, primarily as a result of wartime-generated general rate increases which affected Maritime movements more adversely than those in the rest of Canada. It was not until the passage of the Maritime Freight Rates Act in 1927 that the national policy of providing a lower-than-normal rate structure for this area was re-established and put on a statutory basis.

In the west, the prime example of national policy bringing itself to bear on the railway freight rate structure is to be found in the Crowsnest Pass Agreement of 1897. Under this Agreement the Canadian Pacific Railway Company obtained substantial governmental financial and land grant assistance in building a rail line through the Crowsnest Pass and the rich mining area of southern British Columbia — a development link which both the Federal Government and the railway company were anxious to obtain as rapidly as possible in order to forestall penetration of the area by United States lines. As a *quid pro quo* for this assistance, the Canadian Pacific Railway Company agreed to reduce freight rates on western grain and flour moving east for export via the Lakehead by 3 cents per 100 pounds and, in addition, to lower by 10 per cent or more the rates on a long list of settlers' household effects and building supplies being shipped to the West from Eastern Canada — a reduction in rates which was desired by the Government in order to give additional stimulus to settlement of the West and to ensure the development of a prairie economy based on grain production. Thus, the Crowsnest Pass Agreement between the Canadian Pacific Railway Company and the Federal Government became a key component of national policy relating to Western Canada and in 1925 it was, with certain modifications, translated into the present statutory form which gives to Parliament the sole responsibility for setting the level of rates on grain and grain products moving to export positions.

After passage of the Railway Act of 1903 the newly-established Board of Railway Commissioners became an important vehicle for influencing the railway freight rate structure in the interests of national policy objectives. Decisions of the Board in a number of key rate cases which

came before it during the first quarter of the twentieth century had the effect of ameliorating in significant degree the disparity in rate levels between Eastern and Western Canada which had developed in the previous period. They did not, however, entirely succeed in providing the equivalent of the natural advantage which the presence of a system of transportation by water in Central Canada has always given to shippers in that area. Thus, in a variety of ways and with a reasonable degree of success the Federal Government, through the use of both statutory and regulatory rate-making powers, sought to influence the character of the railway system so as to help overcome obstacles to national unity and promote the welfare of the country as a whole.

Complementing Federal Government policies concerning water and rail transportation has been the public assistance given to the development of Canadian harbour facilities. Dependence on export trade and the desire to establish and maintain an east-west axis of transportation has necessitated large financial contributions by the Federal Government to the building of port facilities at principal export outlets on the Atlantic and Pacific, the St. Lawrence River and the Great Lakes. National policy as it pertains to harbour operations has been carried out by the National Harbours Board since 1936, and the facilities under its control now represent a capital investment of over \$350 million. In addition to these facilities, heavy federal contributions have been made to virtually all other ports in Canada.

The advent of pipelines as an important means of transport in Canada provides a particularly clear example of how the transportation system continues to be used as an instrument of national policy objectives. During 1956, in a situation where private enterprise was finding it exceedingly difficult to obtain sufficient funds to finance that part of the Trans-Canada gas pipeline which was planned to cross the sparsely populated areas of northern Ontario, the Federal Government in conjunction with the Ontario Provincial Government agreed to put up the capital necessary to ensure that an all-Canadian line would be built.

Probably in no other field of activity involving transportation, other than canal building, has national policy been such a determining factor as in the development of Canada's air transport facilities. The airplane, of course, offers a particularly appropriate solution to such traditional Canadian problems as distance, terrain and resource location. However, while private enterprise, beginning with the era of the "Bush Pilot", has certainly made a contribution to Canada's fast growing air transport system, the role of independent airlines has been virtually confined to a "feeder function" with main-line operations between principal Canadian cities retained as an almost complete monopoly of the publicly-owned Trans-Canada Airlines since it was set up by Act of Parliament in 1937. Participation by the Federal Government has also been a very large factor in the construction of terminal airports and the provision of airway navigation and safety systems. Thus, although the evolution of Canada's air transport system is by no means complete, it would appear that a national policy backed by public funds will continue to exercise the dominant influence in determining its future character.

The part played in the growth of Canada's road and highway system by public policy is considerably more complex than in the case of the other modes of transport discussed above. Although in the early days of Canadian development both municipal and provincial governments contributed to building of water and rail facilities, the policies which govern the operations of these means of transport have since Confederation come almost entirely under the control of the Federal Government. The development of these two media has, therefore, been under the influence of policies which are national in scope for many years, and a similar national orientation has prevailed with respect to the more recent growth of air transport and pipelines. Road and highway transportation, on the other hand, has developed in response to a rather different set of circumstances. Under the terms of the British North America Act, jurisdiction over intra-provincial

movements was given to the Provincial Governments and in the case of highway transport the consequence has been that public assistance towards the expansion of the country's road system has traditionally been on a provincial rather than a national basis and, inevitably, has tended to reflect provincial rather than national interests. It has, therefore, been within an essentially provincial framework that the motor transport industry in Canada has had to develop.<sup>50</sup>

National policies, designed in part to alter this situation, have made their appearance only in recent years in the form of federal assistance to highway building under the Trans-Canada Highway Act of 1949 and the "Roads to Resources" programme which was introduced in 1958. The financial contributions from the Federal Government to these programmes have been substantial. In connection with the building of the Trans-Canada Highway they amounted to over \$300 million by early 1960 and a Federal outlay of \$75 million is anticipated over the next few years to assist in building resource roads in the ten provinces. However, since neither of these Federal policies has yet been carried to completion, it is not possible to judge the degree to which they will introduce broader considerations of national concern into the operations of a highway transportation system which developed initially in response to provincial interests.

This brief resumé of the history of governmental participation in the evolution of Canada's transport system serves to indicate the extent to which public policy has used the transportation system as an instrument for promoting the political and economic unity of Canada; it points up also the key role which transportation generally has played in the nation's development. It is, however, the very importance of this transport function and the massive amounts of public assistance to the system that have been involved in its exercise which has tended to obscure the fact that private incentives have also been an extremely important influence on the growth of Canada's transport structure. We must, if we are to obtain an adequate understanding of the complexities of transportation policy in Canada, recognize the fact that the transportation system which has become established in this country is essentially dualistic in nature — reflecting both its function as an instrument of national policy and as a vehicle of private venture operating along the lines of commercial principles. The existence of this situation has meant that national transportation policy in Canada has traditionally had to serve two masters — the dictates of public necessity and the requirements of commercial enterprise. Since the objectives of the former are not necessarily consistent with those of the latter — they are, in fact, often in conflict — the successful execution of transport policy in Canada has never been a simple task. To cope with this dichotomy in the transportation system the Federal Government has customarily attempted, insofar as possible, to minimize the degree of conflict between public and private interests. In other words, it has attempted to effect policies which fulfil broad national objectives while, at the same time, creating the kind of climate which encourages, or at least does not interfere to any significant extent with, efforts by private enterprise to develop a financially sound and efficient transport system which is responsive to market forces.

It would appear that until relatively recent times the Government has been, broadly speaking, successful in carrying out such a policy.<sup>51</sup> One of the main reasons for this success was, we believe, that the transportation environment within which Government policy operated was, although not confined to one mode alone, nonetheless, essentially monopolistic in character. Water transport, by and large, had a role to play in the system as a whole which was intrinsically limited in scope and, as a result, it tended to complement rather than compete with the railway system which

<sup>50</sup> The implications of this phenomenon in terms of road-rail competition have been examined at some length in Part I of this volume, and in the special study *Truck-Rail Competition in Canada*, by D.W. Carr & Associates, to be published in Volume III of this Report.

<sup>51</sup> The overbuilding of railways during the period 1900-1914 resulted from a general mistaken judgement as to the pace at which the Canadian economy was growing and did not reflect a conflict between public and private interests which federal policy was unable to resolve.

developed in conjunction with it; such competition as did exist between the two modes became relatively stabilized at an early stage on the basis of the significant differences in price and service. Thus, within a framework of transportation policy which offered the prospect of reasonable returns on invested capital private enterprise was encouraged to undertake the development of an integrated transport system along commercial lines – and whenever there appeared to be gaps in this system relative to national policy objectives they were filled by the provision of public assistance which made certain that the kind of transport facilities which were considered necessary to the national welfare became available. Moreover, because water and rail transport in Canada were basically complementary rather than competitive, public assistance could be given to one or the other as required by national policy objectives with little danger of upsetting the balance between them or distorting the development of the system as a whole. Furthermore, obligations placed upon the carriers, particularly the railways, in return for this assistance did not create significant inequities between shippers or regions since in a monopoly environment the costs associated with the performance of these obligations could be spread over the whole system. In short, prior to the advent of a competitive transportation environment, national transportation policy was able to adjust itself with relative ease to the operations of a semi-public, semi-private transport system based on water and rail, with each mode exercising within its own sphere a virtual monopoly and each making its own special contribution to the enhancement of the national welfare.

The successful implementation of such a transportation policy during the years following Confederation made it possible, in large part, to surmount the most formidable of the obstacles which presented themselves to the evolution of Canadian nationhood. National political and economic unity was established on a firm basis, disparities between regional areas caused by distance and terrain were rendered more tolerable, the Canadian economy was able to develop along lines which were close to but distinct from those of the United States, and the resolution of other problems which seemed so overwhelming in the early days of Canadian history was greatly aided through the construction of a national transportation system which effectively incorporated both public and private initiatives. The financial cost to the public measured in absolute terms has certainly been very large – running into the billions of dollars. Measured, however, in relation to the size of the problems which had to be surmounted, it does not appear to be excessive.

There have, of course, been errors in judgement made in the application of national transportation policy – just as there has been, at times, a lack of clarity concerning the national objectives to which transportation policy was intended to apply. With the benefit of hindsight all these examples of human fallibility have, on occasion, been given a price tag and used as a source of continuing criticism of Canada's transportation system and the policies which affect its operations. There is a danger, however, that an approach to National Transportation Policy which is excessively preoccupied with its financial aspects may tend to overlook the high national objectives which would not otherwise have been attained; it can also result in a lack of understanding of the complex character of Canada's transportation structure and the problems which beset it. It should be quite apparent that as long as the transportation system is required to perform services which do not reflect commercial incentives, financial assistance from the government will be a necessary concomitant of transportation policy. We would not wish, in other words, to encourage the Canadian public to believe that a country such as ours can expect to obtain the kind of transport facilities, designed to fulfill national policy objectives that transcend commercial considerations, without a continuing outlay of public funds of a considerable order of magnitude. At the same time, however, we would point out that the means whereby this outlay may be kept to a minimum by deploying it in the most efficient and economic manner has been one of the chief concerns of this Commission in the framing of its recommendations as to the National Transportation Policy.

### Transportation's New Role in National Policy

We have seen in the preceding section how national transportation policy in Canada has had to accommodate itself to a transportation system which is dualistic in nature – in part an instrument of national policy objectives and in part a commercial enterprise directed towards efficiency and economy. We have made a judgement that, under the conditions which prevailed in a monopolistic environment, the Federal Government was able to devise a transportation policy which was generally successful in carrying out this complex task. The thesis of this Report is, however, that substantial adjustments in national transportation policy are now in order if the nation is to attain a policy which is adapted to the present competitive transportation environment. While the reasoning behind this thesis is expressed in various sections of the Report it would appear desirable, at this stage, to put forward a brief recapitulation of it.

The effects upon the transportation system in Canada of the changes from a monopolistic transportation environment to a highly competitive one has been examined in some detail in Volume I. We have concluded that, in general, the country had benefited greatly from the growth in the system's capacity, efficiency and conditions of service which has been associated with the spread of competition. The development of the trucking industry, for example, has provided the kind of flexible transport services which Canada's growing secondary industry required. Pipelines have made possible the transportation in bulk of oil and oil products overland at a cost considerably below that attainable by any other mode. Air transport has furnished the means of moving men and material over great distances at speeds which no other carrier can approach. Thus, because of inherent advantages which were reflected in price or service, these new modes have established their claim to carry that portion of total traffic to which they were best adapted; and have done so by taking it over within a relatively short space of time from the older forms of carriage such as water and rail. It is important to note, however, that once this initial take-over process, involving a redivision of existing traffic along more economic lines, became well-established, the growth of the newer carriers has tended to reflect their comparative abilities to obtain a share of the increased demand for transportation services which has accompanied Canada's economic development since the end of World War II. The result has been that through the play of competitive market forces the transportation system as a whole has tended to become increasingly complementary and integrated. In other words, within the new competitive environment there has been, broadly speaking, a significant degree of accommodation between the various modes and what appears to be in the process of evolving is an increasingly balanced transportation system which reflects both the economic advantage of the different carriers and the essential transport needs of the nation.

At the same time, however, as we pointed out in Volume I, the railways have not shared to the same extent as other carriers in the evolution of the transportation system which has accompanied the growth of competition and, moreover, not all areas of the country have derived equal benefits from it. One obvious reason why the railways have not kept pace is that changes in technology and in the nature of the demand for transport facilities have given the newer modes of transport a definite economic advantage over the railways in the carriage of certain kinds of traffic. However, in a dynamic free enterprise economy such changes are continually going on in all sectors of the economy. They are, of course, both desirable and necessary and if a country is to reap the maximum benefit from them they should be encouraged rather than resisted by public policy. Thus, the preservation of obsolete forms of transport, railway or other, by means of public subsidies cannot be justified on economic grounds and is certainly not, in our view, one of the objectives for which this Commission was set up.

On occasion, however, there may exist a situation where obsolescence is more apparent than real and this we found, in some degree, to be the condition of the railway industry today. In our judgement the evidence is clear that the ability of the railways to compete with other modes of

transport has been seriously impaired because of the burden of obligations which they acquired as an instrument of national policy during the years of railway monopoly and which other and newer forms of transport do not carry. A detailed examination of this particular situation has led us to the conclusion that national transportation policy can no longer ignore — as it was able to in the past — the consequences for the transportation system of using parts of it as an instrument of national policy. If the competitive relationship between the various modes is allowed to be affected by non-economic considerations the result will be the misallocation of resources and the distortion of the transportation system as a whole. Such effects, wherever and whenever they occur, must, in our view, be neutralized by appropriate public action.

Thus, our recommendation in Volume I that certain payments be made to the railways was directly related to our estimates of the cost of the burden to which their role as an instrument of national policy has subjected them. It is designed to offset that burden during that period of years which will be required for the railways to adjust their operations to the competitive environment and to take up their proper position in the transportation system as a whole. This financial assistance, though it specifically concerns the railways, has as its ultimate purpose the improvement of the entire transportation structure by helping to ensure that the railways are given a fair and equal opportunity in the transportation market to realize their full potential and to obtain that share of traffic to which, by nature of inherent advantage, they are entitled. Insofar as this is effected it will improve the financial position of the railways and thus tend to mitigate those regional inequities in the transportation system which have developed as a consequence of the weakened competitive position of the railways. The fact that at this point in time the railways have been singled out as recipients for financial assistance is simply an accident of history; the principle — applicable to all modes — is that in a competitive environment it becomes an obligation of public transportation policy, whenever a carrier is required to act as an instrument of national policy objectives, to reimburse the carrier concerned for the costs associated with that public function in order that a proper competitive balance will be maintained in the transportation market.

Our views as to the direction which national transportation policy should take in the future do not, of course, conclude with this observation concerning the financial aspect of the burden problem. We have, in fact, been very much concerned in this volume with those other elements in the total picture which have distorted the capacity of particular modes to operate in a way that reflects their appropriate economic position in the transportation system. It was, moreover, pointed out in Volume I that in addition to burdens which should be offset there is a need to remove certain advantages which so-called "chosen instruments" of transportation obtain as a result of the use which is made of them in the pursuance of national policy objectives; advantages which interfere with the achievement of the sort of fair and equal conditions which we have proposed should prevail in the transportation market. Thus, we will recommend, in the context of our examination of special problems involving the use of transportation, that competitive advantages which accrue to one particular mode as a result of its historic involvement in broad national policy considerations must be eliminated, either by making available to all modes the advantages that hitherto have been reserved to the "chosen instrument" or by finding a non-transport means of achieving the same national policy objective.

Implementation of this recommendation together with the other recommendations which we have thus far proposed would provide that basic conditions to enable Canada to move towards the balanced and efficient transportation system needed to meet the nation's transport requirements. Yet beyond this, we recognize that there are special regional and industrial problems in Canada which, although they involve the transportation medium and have thus assumed the status of "transportation problems", may not be fully embraced in the general framework we have put forward for dealing with the underlying difficulties of the transportation structure itself. These special problems are related to public policy. They are examined in the following chapters of the Report.

### Conclusion

The essence of the position we have taken with respect to national transportation policy is that it is no longer possible, as it was in the monopolistic era of transportation, to treat a particular mode of transport in relative isolation from all others. It is, to us, manifest that in the present situation of competitive coexistence the attainment of an efficient and balanced transport system will require that careful attention be paid to the effects of policies relating to one carrier upon all those other carriers which have become an integral part of the system. The transportation structure, in other words, must be looked at *in toto*. Only a national transportation policy which adopts such an approach would, we believe, be properly equipped in the new competitive environment to meet the present needs and difficulties of Canada's increasingly complex system and thereby enable the system to fulfil national policy objectives and at the same time to develop along commercial and market-oriented lines.

The following chapters will attempt to follow out the logic of our conclusions concerning national transportation policy in its relation to certain regional and other problems. The analysis will be directed particularly towards certain major problems which public policy has customarily sought to meet, at least in part, by means of the transportation system. This does not, of course, imply that we will call into question the national policy objectives themselves. They are not as we have made clear above, within our Terms of Reference. We will, however, attempt to assess the implications of the use of transportation as a means of meeting these problems, as well as the efficacy of the transportation instrument as it operates in the context of the particular conditions associated with each of the special problems. In so doing, it is our intention to suggest ways and means whereby transportation may, if necessary, continue to be used as an instrument of national policy without interfering with what we consider should be the prime objective of national transportation policy — that is, the development of an efficient, balanced and fully adequate transport system.

## CHAPTER 8

# TRANSPORTATION AS AN INSTRUMENT OF NATIONAL POLICY THREE CASE STUDIES

For national policy reasons the Government of Canada has over the years assisted certain shippers by bearing a portion of their rail transport costs. Three principal and representative plans by which this has been accomplished are known as the Maritime Freight Rates Act, the "Bridge" Subsidy and Feed Freight Assistance.<sup>52</sup>

While the objectives of all plans are similar, the methods of achieving the objectives vary. Under the Maritime Freight Rates Act the Government pays a definite percentage of each shipper's rail transport costs within and out of the designated region. In contrast the "bridge" subsidy authorizes a set amount of money to roll back so-called non-competitive rates on rail movements between Central and Western Canada. The Feed Freight Assistance pays a varying part of the cost of moving a specific commodity, feed grain, from the Prairie Provinces to British Columbia and Eastern Canada.

In this chapter each of these plans is examined and assessed in the light of the criteria developed in the preceding chapters for the consistent operation of a National Transportation Policy when transportation is used as an instrument of national policy.

### 1. MARITIME FREIGHT RATES ACT

The changes which have occurred in transportation since the passage of the Maritime Freight Rates Act in 1927 illustrate well how a National Policy which uses transportation to achieve certain ends can have those ends endangered. The objectives which were put forward in 1927 for the policy of transportation rate reduction in the selected Maritime territory are now incompletely being achieved because of the growth of competition. Furthermore, the availability of competitive services in transportation is being inhibited by the partiality of treatment in restricting the assistance to movements by rail.

In some detail we examine below the situation respecting the economic needs of the Atlantic Provinces as set out in selected parts of certain submissions. We do so with two purposes in mind. The first is to examine those aspects of the Maritime Freight Rates Act which are at variance with the objectives of National Transportation Policy as set out in this Report, and to make recommendations for correction. The second purpose is to use the case of the Atlantic Region to illustrate the principle which should guide policy in its use of transportation as an instrument to achieve regional and industrial development.

<sup>52</sup> There are a number of other plans, both federal and provincial for extending assistance to shippers for particular purposes. They are all similar in some form or other to the principle and processes illustrated in the three selected for examination here. The most recent, the Freight Rates Reduction Act, dealt with in Chapter 4, is an extension of the principle introduced by the "bridge" subsidy, and needs no further treatment here.

On the first we have specific conclusions to reach and recommendations to make. On the second we are confined by our Terms of Reference to suggesting, not the level and extent of assistance, but methods of employing it which will, insofar as the use of transportation makes possible, come closest to achieving the objectives of national policy for the Region. Since the two purposes are interacting, it is necessary to treat them to some extent together, leaving the separation of them to the end of the analysis.

### National Policy in the Maritime Freight Rates Act

The Maritime Freight Rates Act (17 George V, Ch. 44) became effective on July 1, 1927. It was enacted by Parliament following recommendations made in the Report of the Royal Commission on Maritime Claims (the Duncan Commission). The reasons for the legislation were given in the preamble to the Act:

"WHEREAS the Royal Commission on Maritime Claims by its report, dated September 23rd, 1926, has, in effect, advised that a balanced study of events and pronouncements prior to Confederation, and at its consummation, and of the lower level of rates which prevailed on the Intercolonial system prior to 1912, has in its opinion, confirmed the representations submitted to the Commission on behalf of the Maritime Provinces, namely, that the Intercolonial Railway was designed, among other things, to give to Canada in times of national and imperial need, an outlet and inlet on the Atlantic Ocean, and to afford to Maritime merchants, traders and manufacturers the larger market of the whole Canadian people instead of the restricted market of the Maritimes themselves, also that strategic considerations determined a longer route than was actually necessary, and therefore that to the extent that commercial considerations were subordinated to national, imperial and strategic conditions, the cost of the railway should be borne by the Dominion, and not by the traffic which might pass over the line; And whereas the Commission has, in such report, made certain recommendations respecting transportation and freight rates, for the purpose of removing a burden imposed upon the trade and commerce of such Province since 1912, which, the Commission finds, in view of the pronouncements and obligations undertaken at Confederation, it was never intended such commerce should bear; And whereas it is expedient that effect should be given to such recommendations, in so far as it is reasonably possible so to do without disturbing unduly the general rate structure in Canada: Therefore His Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:"

The Act provides two main advantages to shippers in select territory: (1) a 20 per cent reduction of railway freight rates on certain "preferred movements" within the "select territory", and (2) the treatment of traffic moving over the railway car ferries as if it were all-rail traffic.

Select territory now includes New Brunswick, Prince Edward Island, Nova Scotia, Newfoundland, and that portion of Quebec east of Levis and Diamond Junction to the Quebec boundary and south of the St. Lawrence River.

Preferred movements are of four types:

- (a) Local traffic, all-rail, between points in select territory; example, Sydney to Newcastle;
- (b) Traffic westbound, all-rail, from points in select territory to other points in Canada; example, Moncton to Montreal via Levis; the reduction applies to the Moncton-Levis proportion of the through rate;
- (c) Export traffic by rail and sea, from points in select territory through points in that territory, destined overseas; example Fredericton to Liverpool via Saint John, the rate affected is that applicable from Fredericton to Saint John;

- (d) Traffic westbound, rail-and-lake and rail-lake-and-rail, from points in select territory to other points in Canada; example, Moncton to Winnipeg, the reduction applies to the Moncton-Levis or Moncton-Diamond Junction proportion of the through rate.

The Act further provides, by way of clarification, that the following are not preferred movements:

- (a) Rail traffic to or from the United States;
- (b) Rail traffic eastbound into select territory from other points in Canada;
- (c) Import traffic from overseas;
- (d) Passenger or express movements.

The prescribed rate reductions are incorporated in the freight tariffs published by the railways. The railways are paid from public funds an amount calculated to be the difference between the tariff tolls on all preferred movements and the normal tolls that would have been effective but for the Act.

Since 1957 the rate reduction has been 30 per cent on the select territory portion of outbound shipments to other parts of Canada. This rate has not been incorporated into the Maritime Freight Rates Act, but has been authorized by annual vote of Parliament. The total payment to the railways in recompense for the rate reduction now exceeds \$14 million a year.

#### **The Need for Change in the Act**

From the submissions made to us it is clear that there is a conviction in the Atlantic Provinces today that the benefits of the Maritime Freight Rates Act are not now as significant as they appear to have been when the Act came into force. It was stated to us that changes which have taken place since 1927 have made it more difficult for producers in the Atlantic Provinces to reach the markets of Central Canada in competition with industries located closer to these markets. According to the Maritimes Transportation Commission: "The changes referred to were principally two in number: (1) the adverse effects of the growth of truck competition on the competitive position of Maritime industry in the central markets, and (2) the horizontal method of applying post-war freight rate increases."<sup>53</sup>

This brings the Maritimes Transportation Commission to the conclusion that "The mechanics of the Act are no longer able, in view of the changes which have taken place in transportation, to carry out adequately the purpose of the legislation".<sup>54</sup> Dissatisfaction with the Act is also evident from other submissions emanating from the Atlantic Provinces.

Several proposals were made to us by Atlantic Provinces interests for the revision of the Maritime Freight Rates Act. All of them were designed to extend the benefits of the Statute. While these proposals differed in detail, they were based on the desire of industry in the Atlantic Region to have its distance from the central Canadian markets minimized in terms of freight rates.

The submission made by the Dominion Steel and Coal Corporation Limited proposed a scheme by which the industry concerned would have "not in excess of rate parity" in the Montreal market

<sup>53</sup> Transcript of evidence, *Hearings*, September 12, 1960, Vol. 83A, p. 34.

<sup>54</sup> *Ibid.*, p. 66.

with its major competitor. The difference between the rate normally charged by the railways and that arrived at after calculation of the "parity rate" would be paid to the carriers by the government in much the same way as the subvention now paid under the Maritime Freight Rates Act. It would be superimposed by special legislation on the present 30 per cent subvention.

The submission points out that the approach taken "is predicated upon the historical purposes behind the Maritime Freight Rates Act".<sup>55</sup>

Another proposal based on the historical purposes of the Maritime Freight Rates Act also contemplates the extension of the current subvention rate. Acadia-Atlantic Sugar Refineries Limited recommended that on movements of sugar outbound from select territory the present subvention rate of 30 per cent be increased to 100 per cent so that, in effect, the part of the rate attributable to the haul within select territory would be covered in full by subsidy. The Company stated that "this may well be a solution of general application to the transportation problem of Maritimes' industry seeking central Canadian markets".<sup>56</sup>

It should be noted that both the foregoing proposals for a revision of the Maritime Freight Rates Act were formulated primarily on the needs of the particular industries advancing them, although it was indicated that the solutions recommended might be generally applicable.

The submission made by the Maritimes Transportation Commission, on the other hand, recommends changes which are intended to apply to industry in the Atlantic Region as a whole.

The MTC brief recognizes that no scheme can be devised which would "ensure each Atlantic Province producer the same rate on his product to Central Canada as the rate available to his Central Canadian competitor in that market".<sup>57</sup> The brief recognizes also that a formula designed to reach this objective would be impracticable if it were to apply to all industries in the Atlantic Provinces.

According to the Maritimes Transportation Commission, three objectives must be met by any corrective measures:

"A valid revision of the Maritime Freight Rates Act must meet the following requirements:

"(1) It must be able to bridge the rate gap between Maritime and Central Canadian producers in the important market of Central Canada.

"(2) It must do this over time and must, therefore, contain a mechanism which will compensate for rate distortions arising (a) from disparities in the intensity of carrier competition in the two territories and (b) from horizontal percentage rate increases.

"(3) It must not deprive Atlantic Provinces shippers of the opportunity of availing themselves of services and rates of carriers other than the railways."<sup>58</sup>

The brief then sets out a scheme designed to meet these objectives. The proposal that emerges is, in brief, that the one per cent Waybill Analysis be used as the basis for comparing the charges paid by Maritime shippers with those paid by their competitors, that from these samples a determination be made of the commodities which move regularly both from the Maritime to the Eastern Regions (i.e., Central Canada) and within the Eastern Region, that from each year's

<sup>55</sup> Transcript of evidence, *Hearings*, September 14, 1960, Vol. 85, p. 14745.

<sup>56</sup> Transcript of evidence, *Hearings*, November 10, 1959, Vol. 4, p. 410.

<sup>57</sup> Transcript of evidence, *Hearings*, September 12, 1960, Vol. 83A, p. 71.

<sup>58</sup> *Ibid.*, p. 67.

Analysis the over-all average freight charge per hundred pounds be established for all such goods shipped from the Maritime Region, that the over-all average freight charge be established similarly for all such goods shipped within the Eastern Region, that calculation be made of the percentage by which the Maritime average charge must be reduced to equal the Eastern average, and that all shipments from the Maritime to the Eastern Region be eligible for a subsidy of this percentage of the charges actually paid. This device is deemed to meet the first two requirements above; the third is to be met by paying the subsidy either to the shipper direct or to all types of for-hire carriers.

It is to be noted that the subvention proposed is to be superimposed on the present subsidy under the Maritime Freight Rates Act: "the proposal is for a new subvention over and above the present subvention under the Maritime Freight Rates Act and the subvention under that Act is not to be affected".<sup>59</sup>

#### Analysis of the Need for Change

The general impression which may have been created by submissions to this Commission is that the chief problems of the Atlantic Provinces arise from transportation disadvantages. While transportation is undoubtedly an important factor in the rate of development of a region, it is not necessarily either the only or the most important one. This is recognized by the Atlantic Provinces themselves: "There are, of course, a number of measures which could be taken in addition to transportation as elements of a national policy to stimulate economic development in the Atlantic provinces or any depressed area".<sup>60</sup>

The case for assistance advanced by the Atlantic Provinces rests on twin foundations: (1) Undertakings given at the time of Confederation and confirmed by the passage of the Maritime Freight Rates Act and (2) present and future economic need.

The argument that is developed can be highlighted by the following three quotations:

"In the respectful submission of the Maritimes Transportation Commission, the situation confronting the Atlantic Provinces today is the same as they faced in the 1920's. That latter situation, in the words of the Duncan Commission, was 'one that can only be dealt with in a broad spirit, and one that for the economic welfare of the Maritimes must be met without delay'."<sup>61</sup>

"Historically, therefore, there is ample precedent for a de-emphasis of distance as a factor in rate making on Atlantic Provinces traffic. The Maritime case for a de-emphasis of distance does not, however, rest on historical precedent alone. It is based equally firmly on the recognition that transportation has a significant role to play in raising the economy of the Atlantic Region to the level of the other regions of Canada."<sup>62</sup>

"It is the respectful submission of the Maritimes Transportation Commission that, just as in the past transportation has been used as an instrument of public policy in the case of the Maritimes, it should again be so used today as an integral part of any measures which must be taken to eliminate the general income differentials between the Atlantic Provinces and other parts of Canada."<sup>63</sup>

<sup>59</sup> Transcript of evidence, *Summations and Arguments*, February 14, 1961, Vol. 2, p. 8.

<sup>60</sup> Transcript of evidence, *Hearings*, September 14, 1960, Vol. 85, p. 14673-4.

<sup>61</sup> Transcript of evidence, *Hearings*, September 12, 1960, Vol. 83A, p. 75.

<sup>62</sup> *Ibid.*, p. 81.

<sup>63</sup> *Ibid.*, p. 81.

It will be noted that the last two quotations imply policies for "raising the economy of the Atlantic Region to the level of the other regions of Canada" and to "eliminate the general income differentials between the Atlantic Provinces and other parts of Canada". Such policies, of course, go beyond the undertakings given at Confederation.

### Considerations Respecting the Application of the Act

It might well be said that the Maritime Freight Rates Act should be considered as the instrument by which Canada attempts to give effect to certain pronouncements and obligations undertaken at Confederation. Parliament, as the author of the legislation, has taken it upon itself to prescribe the conditions by which this historic right of the Atlantic Provinces shall be met. In the opinion of this Commission, Parliament must remain the sole judge of whether and to what extent the Act continues to achieve its historic purpose.

The Commission feels, however, that it has an obligation to comment on certain features of the Maritime Freight Rates Act which should be taken into account by Parliament in its continuing assessment of the Statute. These features have to do with the impact and effect which the application of the MFRA assistance has on the transportation industry.

#### **Restriction of the Act**

It is significant to note that virtually all the comments made to us on the Maritime Freight Rates Act related to those provisions of the Act which apply to traffic *outbound* from the Atlantic Provinces. In fact, the evidence before us is such as to call into question the necessity of continuing to have all intra-Maritime traffic subsidized on the present basis.

While precise figures were not available to us, there is no doubt that a large proportion of the annual subvention under the Act is now being paid in respect of traffic moving entirely within select territory. If it was, indeed, the intent of the Maritime Freight Rates Act "to afford to Maritime merchants, traders and manufacturers the larger market of the whole Canadian people instead of the restricted market of the Maritimes themselves", then that intent is not being assisted to any significant extent by subsidizing all intra-Maritime traffic. In fact, evidence was presented to us which would indicate that the internal payments made under the Act, which are paid on rail movements only, tend to inhibit the full development of alternate modes of carriage in the Atlantic Region.<sup>64</sup> With this contention we are in agreement.

We are convinced that the development of the trucking industry in the Provinces of Nova Scotia, New Brunswick and Prince Edward Island has now, in spite of the handicap, progressed to the point where the withdrawal of the subvention on intra-Maritime shipments will in general bring rail rates to a level which is favourable to the encouragement of traffic. The consequent shift of resources from rail to non-rail investment will be in response to demand for that service from shippers.

The Commission is not unmindful of some of the disturbances in shipping patterns which may be created, should Parliament decide to amend the Maritime Freight Rates Act by eliminating the payment of the 20 per cent subvention on shipments solely within select territory. On the whole, however, these disturbances should be more than offset by the stimulus given to competition. This competition will, over time, confer the same or greater benefits than those now given under the Act to shipments within select territory.

<sup>64</sup> Transcripts of evidence, *Hearings*, April 29, 1960, Vol. 59, p. 10603-4 and *Hearings*, September 12, 1960, Vol. 83A, p. 95.

There is one exception at the present time. Our studies have shown that there is as yet no really pervasive competition to railway services on traffic within Newfoundland and between Newfoundland and the Maritime Provinces. Should Parliament decide to eliminate the Maritime Freight Rates act subvention on shipments within select territory, it is strongly recommended that an exception be made on rail traffic within, and to and from Newfoundland and present select territory until such time as competitive services have developed which are comparable to those available to shippers in the remainder of select territory. With this in mind, it is suggested that the continuing payment of the Maritime Freight Rates Act subvention on rail traffic within Newfoundland and between that Province and the remainder of select territory be again reviewed in ten years time.

### **Extension of the Act**

In Volume I<sup>65</sup> of our Report we have said, "When transportation assistance is introduced as a policy designed to assist a region or an industry it should be implemented so that there is no distortion introduced into the transportation industry itself. ... Placing upon one mode of transport a benefit because of regional or industry transport policy is to give it an advantage over its competitors not dictated by efficiency, with consequent over-expansion of the favoured mode, and constraint upon the others."

Recommendations have been made to us not only by the non-participating carriers but, indeed, on behalf of the shipping public of the Atlantic Provinces, to have the Maritime Freight Rates Act subventions apply to all types of carriage. There are sound economic reasons to support the proposal and the chief objection seems to be that it would create insuperable administrative difficulties.

There is no doubt that the extension of the Act to cover movements of goods by all modes of transport will increase the administrative burden. But we do not see that the increase is either insuperable or unduly expensive. It appears that much of the difficulty would be over-come if the provisions of the Act were to apply to any properly licensed public common carrier who submits his claims in a specified manner. Problems of certification of claims require only the usual vigilance and spot checking. Violations of the Act should result in the loss of the privilege of participation. If, as we recommend, the provisions of the Act apply only on traffic moving westward out of the select territory the numbers of participants will be tolerable.

The results of continuing to confine participation under the Act to rail carriers, bears serious consequences both for the allocation of resources in transportation in the Atlantic Provinces and for shippers there.<sup>66</sup>

The principles stated in Volume I and elaborated throughout Volume II are brought to the test in this instance. It is our conviction that favouring one mode over others will limit the choices open to shippers and keep at least some rates higher than they would be under effective competition. The effect of the present partiality of treatment is to confine some business to the rails at rates higher than would prevail under conditions of equal treatment.

<sup>65</sup> Page 72 to 73 First Printing, Page 33 Second Printing.

<sup>66</sup> The special situation in which Newfoundland finds itself and which we discuss in Chapter 9 of this volume makes it appropriate to confine, for the time being, participation under the Act to rail carriers of traffic within Newfoundland and between that Province and the remainder of select territory.

#### **Extension of the Act and the Position of the Railways**

The argument may be advanced that extending participation to all carriers will undoubtedly cause additional hardship to the railways. Although this argument is extraneous to the issue we do not deny its validity. Indeed, we must support it, for it is part of our contention that a proportion of the benefit under the present circumstances inevitably accrues to the carrier and not to the shipper. Our position must be that the Maritime Freight Rates Act was not and is not a measure designed to assist the railways. It was *inter alia*, designed to prevent the railway from imposing the full burden of its high costs on the shippers of the region. The Maritime Freight Rates Act is not a vehicle for railway assistance.

## APPENDIX A

### **Special Regional Assistance**

In the introduction to this volume of our Report we drew a clear distinction between the objectives of the National Transportation Policy, which we deem to be efficiency and economy in the transportation system, and the objectives of a National Policy which uses transportation to achieve certain ends. We emphasized that the assessment of national policy objectives for economic development, political unity, social welfare or any other purpose is, in our view, a matter which very definitely is not within our Terms of Reference. We stated further that in regard to such objectives we felt our area of responsibility to be confined to making pertinent observations respecting the effects on the National Transportation Policy of national policies making use of transportation.

We also suggested that, properly applied, transportation may be an effective instrument to use for the pursuit of national policy objectives, particularly where great distances are a limiting factor to balanced national growth.

It is within this framework that we approach the economic case of the Atlantic Provinces for transportation assistance.

#### **The Case for Transportation Assistance to the Atlantic Regional Economy**

The submissions from the Atlantic Provinces put forth an argument for transportation assistance on the grounds that the economy of the Atlantic Region operates below levels of other regions of Canada. They contain an invitation to the Federal Government to eliminate general income differentials between them. They propose that transportation be used as an instrument of national policy as an integral part of any measures to this end.

Apart from the evidence on the economy of the Atlantic Provinces which was presented to us in the submission of the Maritimes Transportation Commission, there is a wealth of other analytical material available from which one can draw the conclusion that the economy of these Provinces lags behind that of Canada as a whole. It is feasible, in the light of this conclusion, to use transportation assistance as one of the means of dealing with this lag.

The Atlantic Provinces themselves proposed that such assistance might be given in respect of their economic position and that it should be in the form of a subvention separate from that under the Maritime Freight Rates Act. While disclaiming scientific accuracy, they set out in the submission of the Maritimes Transportation Commission a method by which the level of such special assistance might be determined. We feel that our Terms of Reference do not include the assessment of the propriety of the assistance level proposed. It is, however, clear that such a level can be determined, if it is beneficial to use transportation as an instrument of national policy in the region of the Atlantic Provinces.

In such a case, consideration should be given to designing the special assistance in such a way as to achieve the optimum result. It was represented to us that, "It seems unlikely that the employment which results from the further development of the resource-based industries, from increased activity in construction, or from growth in the service trades will be sufficient to relieve

the pressure of excess labour in primary occupations, including coal mining, and to provide placement for those entering the labour force with increases in population".<sup>67</sup>

It was fully suggested in the evidence presented to us "that one of the major factors creating or causing lower levels of income in the region relative to other parts of Canada has been a lack of growth in secondary manufacturing"<sup>68</sup> and "that transportation might be used as a medium for encouraging the movement of *manufactured* goods from the Atlantic Provinces to the mass markets of Canada". (Emphasis supplied)<sup>69</sup>

Should it, therefore, be deemed advisable to give special transportation assistance to the Atlantic Provinces to overcome economic lag, such special assistance might well be designed to assist the movement of the products of secondary industry where it may have the greatest employment generating impact.<sup>70</sup> It should be practical and administratively possible to define secondary industry for this purpose.

There remains the need for us to reiterate the criteria for such special transportation assistance. We can do no better than to refer again to the principle set out as a guide for policy in Volume I of our Report,<sup>71</sup> "When transportation assistance is introduced as a policy designed to assist a region or an industry it should be implemented so that there is no distortion introduced into the transportation industry itself. Placing upon one mode a burden because of regional or industry transport policies will force a shifting of the burden to some shipper unprotected by competition. Placing upon one mode of transport a benefit because of regional or industry transport policy is to give it an advantage over its competitors not dictated by efficiency, with consequent over-expansion of the favoured mode, and constraint upon the others".

<sup>67</sup> Submission to the Royal Commission on Transportation by the Maritimes Transportation Commission, Vol. 2, Appendix IX, p. 11.

<sup>68</sup> Transcript of evidence, *Hearings*, September 13, 1960, Vol. 84, p. 14546.

<sup>69</sup> *Ibid.*

<sup>70</sup> It is worth recording here that the recommendations we have made to extend the provisions of the Act to cover movement of goods by all carriers will materially assist the products of secondary industry by encouraging more competitive truck rates.

<sup>71</sup> Page 72 to 73 First Printing, Page 33 Second Printing.

## 2. THE "BRIDGE" SUBSIDY

Linking the major resource regions of Canada together with rail transportation has been a fundamental element of national policy. Because of the geography of Canada this has meant the building of some rail lines across extensive areas where topography was rough, population was sparse and resource potentials seemed limited. One of these areas was in the Precambrian region in Ontario lying north of Lakes Huron and Superior. The transcontinental railway lines have provided an essential overland bridge across this region joining Eastern Canada to the Prairies and British Columbia.

Although construction of these main rail lines across northern Ontario in the last half of the nineteenth century opened the extensive mineral resources of Sudbury and other northern areas for development, there was at that time little expectation that the area from Sudbury to the Lakehead would provide enough traffic to support the construction and operation of the eventual three rail lines that traverse this region. Yet anticipations that the traffic passing over this "bridge" between Eastern and Western Canada would eventually justify its construction were apparently inherent in the massive contributions of capital provided by the Federal Government to assist in building the transcontinental rail lines for operation by private firms. This absorption by the Government of a substantial share of the investment costs reduced the revenue requirements of the railway companies and freight rates could accordingly be established at lower levels than might otherwise have been necessary.

While there has been a substantial growth of traffic originating in this "bridge" region it has not increased as much as in the regions it links. In consequence this Northern Ontario region has been regarded as an unproductive area for traffic. In the period following World War II when shippers became concerned with the effects of rising rail freight rates, this factor received considerable emphasis. After examining it a decade ago the Royal Commission on Transportation reported:

"Various submissions were made to the Commission as to steps which ought to be taken to lessen the burden of freight rates for the Western Provinces whose geographical location necessitates a haul of traffic inwards and outwards over a long stretch of unproductive or only partly productive territory."<sup>72</sup>

The railways were faced at that time with additional revenue requirements to meet their rising costs and the nation had established a traditional responsibility for assuming part of the costs ascribable to overcoming long distances in transportation.

The Royal Commission of 1949 to 1951 recommended that "the cost of maintaining that portion of our transcontinental railway system which serves as a link or bridge between East and West be charged upon the general revenues of the country".<sup>73</sup> Such a step was expected to "be particularly effective as a measure of relief in the case of charges on westbound traffic passing over this bridge".<sup>74</sup>

This recommendation was approved by the Government and a bill to so amend the Railway Act was introduced in Parliament in 1951. The bill provided, among other things, for an annual payment of \$7 million to the transcontinental railways to cover the cost of maintaining the "bridge". The special parliamentary committee on railway legislation which was convened to study the new bill presented a further amendment designed to require the railways to apply the

<sup>72</sup> *Report of the Royal Commission on Transportation*, 1951, Ottawa, King's Printer, p. 253.

<sup>73</sup> *Ibid.*

<sup>74</sup> *Ibid.*, p. 254.

subsidy to the reduction of rates on freight traffic moving in both directions across the "bridge" trackage. The amended amendment became section 468 of the Railway Act.

### **Subsidy Payments Formula**

The provisions of section 468 now determine the application of the "bridge" subsidy. It authorizes the payment to the Canadian Pacific Railway Company of an amount equal to the annual cost of maintaining the trackage between Sudbury and Fort William on its transcontinental line. It authorizes payment to the Canadian National Railways of an amount equal to the annual cost of maintaining trackage corresponding in extent to the trackage between Sudbury and Fort William on the Canadian Pacific Railway. Subsection two of section 468 states that the Board of Transport Commissioners for Canada shall determine the annual cost of maintaining the trackage and shall fix the extent of such trackage in respect of each company. The maximum amount payable in each year was fixed at \$7 million. Subsection four provides that the subsidy payments shall be apportioned by the Board between the companies according to the amounts expended by each on the maintenance of its trackage.

Thus the basis on which the \$7 million subsidy should be paid and apportioned between the two railway companies was clearly and specifically established, that is, according to the amount spent by each railway on maintenance of a certain track mileage in the "bridge" area, approximately 551.5 miles on each railway, since that is the mileage between Sudbury and Fort William on the CPR. However, the basis on which the railways should be required to apply the subsidy towards a reduction of freight rates was not established in the Act.

### **Rate Reduction Formula**

Subsection five of section 468 of the Act provides only that the subsidy paid to the railways shall be applied to a reduction in freight rates applying on traffic moving in both directions across the "bridge", in such manner as the Board of Transport Commissioners may direct. On April 16, 1952, the Board of Transport Commissioners issued Circular No. 272 on the "bridge" subsidy, outlining therein the terms and the method of application the Board intended to use. This Circular states, in part:

"The Board recognized that numerous difficulties might arise in the carrying out of the terms of the Act, and held a hearing to obtain the views of interested parties. The views thus obtained justify the Board proceeding with the administration of the statute on an interim basis pending further study and possibly some later amendments."

Circular No. 272 also listed the types of traffic to which the reduction would not apply. In effect the Board's decision provided that only through traffic moving under class and non-competitive commodity rates would be considered as eligible for the rate reduction.

The formula devised for the reduction of these freight rates was the result of a compromise. The Board of Transport Commissioners recognized that shippers and consignees in Manitoba, the eastern half of Saskatchewan and Western Ontario west of the Lakehead would reap the greater benefit if the rate reduction, stemming from the subsidy, was on a cents-per-hundredweight basis. On the other hand, shippers west of the above area would reap a greater benefit by using a percentage as the basis for the reduction in the freight rates. To reconcile these, a formula was developed that provided for part of the reduction to be a percentage of the rate and part to be a fixed sum per

hundredweight. The following table provides an example of how the formula has been applied, using a representative basic freight rate of \$3.00 per hundredweight.<sup>1</sup>

**TABLE V**  
REDUCTIONS FROM STANDARD RATE OF \$3.00 PER 100 POUNDS  
RESULTING FROM THE "BRIDGE" SUBSIDY

Effective date	Per cent of basic rate	Cents per cwt.	Total reduction in cents per cwt. if basic rate is \$3.00 per cwt.
May 1, 1952	2.53 ( 7.6¢)	5.8	13.4
May 1, 1953	3.5 (10.5¢)	9.5	20.0
Nov. 1, 1955	3.5 (10.5¢)	16.5	27.0
Mar. 1, 1956	3.5 (10.5¢)	9.5	20.0
Mar. 1, 1957	3.5 (10.5¢)	7.5	18.0
Mar. 1, 1959	3.5 (10.5¢)	10.5	21.0
Dec. 1, 1959	4.72 (14.2¢)	15.0	29.2

<sup>1</sup> Note that the cents per cwt. reduction had, by 1959, increased more than had the per cent of rate reduction.

### The Application of the Subsidy

The total transcontinental trackage operated by the Canadian National Railways in the "bridge" area is 1,010 miles, compared to the 551.5 miles on the Canadian Pacific. As noted above, however, the CNR can receive the subsidy only on trackage corresponding in extent to that of the CPR.

In allocating the \$7 million annually, the Board has apportioned the subsidy on a roughly equal basis between the two transcontinental railways. The following table indicates the relationships between maintenance costs and subsidy payments from the time the "bridge" subsidy was instituted. Although the CNR has had relatively lower maintenance costs on its equivalent 551.5 miles of eligible trackage, it has received a higher proportion of those costs from the subsidy than has the CPR. at the same time, the CNR received no maintenance subsidy on its additional 458.5 miles of trackage in the "bridge" region.

**TABLE VI**  
COST OF TRACK MAINTENANCE IN THE "BRIDGE" AREA, AND "BRIDGE"  
SUBSIDY PAYMENTS TO THE CPR AND CNR ANNUALLY, 1952 - 59

Year	Canadian Pacific			Canadian National		
	Maintenance costs <sup>1</sup> (millions of dollars)	Subsidy payments <sup>2</sup>	Per cent of cost	Maintenance costs <sup>3</sup> (millions of dollars)	Subsidy payments <sup>2</sup>	Per cent of cost <sup>4</sup>
1952	4.37	2.09	47.8	3.81	2.06	54.1
1953	5.35	3.47	64.9	3.20	3.53	110.3
1954	4.20	3.57	85.0	3.46	3.43	99.1
1955	4.19	3.51	83.8	3.47	3.49	100.6
1956	5.64	3.48	61.7	3.47	3.52	101.4
1957	5.84	3.36	57.5	3.75	3.64	97.1
1958	5.75	3.65	63.5	3.49	3.35	96.0
1959	5.71	3.83	67.1	3.49	3.17	90.8

<sup>1</sup> Calendar years; costs for 551.5 miles Fort William to Sudbury.

<sup>2</sup> Fiscal years.

<sup>3</sup> Costs for mileage between Capreol and Armstrong were used to calculate these equivalent costs for 551.5 miles.

<sup>4</sup> Relates to per cent of calculated maintenance costs of the 551.5 miles of eligible CNR trackage.

### Application of the Rate Reductions

The traffic eligible for rate reduction under section 468 became the class and non-competitive rate traffic. As we have shown in Chapter 3 (Table I, et seq.) of this volume, from 1954 to 1959 there was a sharp reduction in the volume of traffic moving under these class and non-competitive rates. This reduction in class and non-competitive rate traffic can be attributed partly to the railways losing some of it to competing modes but mainly to the railways shifting such traffic to competitive rates and agreed charges. This has been the case with traffic moving over the "bridge" also. The net result is that the rate reduction pertaining to the \$7 million subsidy has been applied to a diminishing volume of traffic and to the shipments of a diminishing number of shippers. This decrease in volume of the traffic eligible for assistance is indicated by the increase in the amount of the rate reduction of some 118 per cent from 1952 to 1959 (Table V).

### Considerations Relative to the Subsidy

In its application the "bridge" subsidy must be considered partly as assistance to a particular mode of transport, the railways, and partly as assistance to particular shippers, those who ship goods under class and non-competitive rates over the "bridge" rail routes. As provided in section 468, the railways gain no direct benefit from the subsidy since they are together required to reduce certain rates sufficient to offset the combined subsidy received. Yet indirectly the two railways may benefit to the extent that these rate reductions enabled them to hold more of the higher-rated "bridge" traffic that the competition of other modes could otherwise have taken from them.

Another feature of the "bridge" subsidy is the difficulty of allocating the burden of rate reduction between the two railways. There is apparently no way of ensuring that the revenue foregone by each railway in rate reductions is commensurate with the amount of subsidy received by each. Information to show whether one railway carried more of the subsidized traffic and thus bore more of the burden of rate reduction was not obtainable but it will be readily appreciated that such could well be the case.

These features of the "bridge" subsidy have been accentuated by the rapid growth of competition in transportation especially during the latter 1950's. The growth of traffic originating in the "bridge" region has also become a factor, in this respect.

Thus, it became evident to us early in our investigations that the effects of this subsidy should be subject to careful consideration relative to National Transportation Policy. As noted in Chapter 1 of this volume, the objective of such Policy is to seek to create an efficient transportation system. We have also set out there the basic elements required to achieve such efficiency — reliance on competition to ensure the allocation of transportation resources to their most productive uses (or, in the absence of competition, such regulation as will accomplish the same result) and that public assistance to carriers or users of transportation should be allotted impartially. The examination of the effects of the "bridge" subsidy can be most effectively related to these principles.

Considering the first element — reliance on competition — the reduction of rail rates brought about by the subsidy has adversely affected competing carriers and the allocation of resources in the industry. Seaway shipping and other water carriers were placed at a disadvantage, relative to their former position, when the subsidy was introduced.

The subsidy virtually eliminated the competition of United States rail routes for the East-West Canadian traffic which, it is claimed, had been a moderating influence on rates over Canadian railroads.<sup>75</sup>

Trucking between Eastern and Western Canada has advanced rapidly despite the subsidy.<sup>76</sup> But this was due in large part to technological improvements in trucks, better highways and more effective management. These improvements have been substantial enough to enable the trucking industry to compete in spite of the advantages given the rail carrier by the subsidy. Yet there can be little question that the subsidy has inhibited this growth of truck competition.

As far as reductions in rates are concerned, we are convinced from the evidence compiled that such competition in the transportation industry has been much more effective in reducing rates than the "bridge" subsidy has. As an illustration of this, when trucks began to carry fresh meat from the West to Eastern Canada the rail rate from Winnipeg to Toronto fell from \$2.89 a hundredweight (\$3.09 without the "bridge" subsidy reduction) to \$2.00.<sup>77</sup>

The second element in attaining efficiency in transportation is that public assistance to carriers or users of transportation should be allotted impartially. The "bridge" subsidy falls short on many counts with respect to this. If such assistance is desirable it should apply to all commodities and all modes of transport. Yet, as we have seen, it applies only to rail transport. It applies only to the small and diminishing volume of traffic shipped under class and non-competitive rates. The growing volume of traffic moving under competitive rates or agreed charges receives no subsidy benefit. It applies only to the diminishing number of shippers who ship this traffic. In addition, under the legislative requirements implementing the subsidy it seems improbable that an equitable method of applying the subsidy could be devised for the impartial allotment of the subsidy between railways, or for the impartial sharing of rate reductions between railways. In these circumstances, the subsidy is not only administratively difficult to implement but it has become increasingly illogical and unfair.

Another inequitable feature that can be attributed to the subsidy is found in its effects on interregional competition. Public assistance to one group or region should avoid substantial disadvantages for other groups or regions. An illustration of this was found in the effect of the subsidy on the market relationships in the Prairie market. Shippers in British Columbia had found it more difficult to compete with Eastern Canada for the Prairie market as a result of the subsidy. British Columbia shippers contended before us that they too had a vast unproductive region to traverse in moving their products to the Prairies. The "bridge" subsidy it was claimed constituted unjust discrimination against shippers in British Columbia shipping to that territory.<sup>78</sup>

Another significant consideration is whether the "bridge" region can still be validly called an unproductive region. The basic justification for the subsidy lay in this concept — that the local traffic was inadequate to support the rail lines in the area, that the burden of support must be borne by the through traffic, and that, this burden being excessively heavy, assistance was necessary. Yet there are many areas in Canada through which transcontinental and other main lines pass where the local traffic is no greater than in this Northern Ontario area.

But whatever its situation may have been when the subsidy was established, we are convinced that the substantial improvement in the productivity of the region since then, no longer justifies its

<sup>75</sup> Transcript of evidence, *Hearings*, September 22, 1960, Vol. 92, p. 15662-3.

<sup>76</sup> *Truck-Rail Competition in Canada*, by D.W. Carr and Associates, to be published in Volume III of this Report.

<sup>77</sup> Tariff CTC 685, CFA 103-T.

<sup>78</sup> Transcript of evidence, *Hearings*, February 23, 1960, Vol. 39, p. 6305 and June 6, 1960, Vol. 76, p. 13469.

being viewed as an "economic desert". Our investigations have shown that within the "bridge" area itself (Sudbury to the Lakehead and Armstrong) there has been considerable economic development since 1951. The population rose from 138,000 in 1951 to 178,000 in 1956. When the 1961 census figures are available, it is expected that the 225,000 mark will have been passed. Gross value of production of the industries located there has shown marked increases. For instance, the value of its minerals rose from \$5.8 million in 1951 to \$32.9 million in 1958; its pulp and paper from \$103 million to \$110 million; its sawmill output from \$4.0 million to \$11.3 million; its other woods operations from \$38.2 million to \$40.7 million and its manufacturing from \$107.4 million to \$123.2 million. With a total value of production of roughly \$250 million or more, and substantial further growth in prospect, there can be little warrant for continuing to consider this area as uniquely barren or unproductive.

Finally, the "bridge" subsidy is basically inconsistent and inequitable in its application. It discriminates between railways in the proportions of total track maintenance costs paid. It discriminates, in its related rate reductions, among shippers and commodities, giving assistance to a few rather than impartially to all. It discriminates among modes of transport with resulting misallocation of resources and lessened efficiency. Unless rate reductions on the eligible traffic moving over the "bridge" on each railway happened to be equal in total value, it would also discriminate in the amount of rate reduction load that each railway is called upon to carry.

In spite of these difficulties inherent in its application the Board of Transport Commissioners has made every possible effort to administer this section of the Railway Act in a fair and proper manner. It might be that the subsidy could be applied with fairness either to the cost of maintenance of trackage or to the reduction in freight rates. It cannot be applied equitably to both at the same time under existing provisions. While such difficulties in administering a policy may not, by themselves, warrant its abolition, we are constrained to record that the Board has been assigned a most difficult task in the administration of the "bridge" subsidy.

In brief, the "bridge" subsidy has adversely affected competing carriers. Yet the evidence indicates that such competition would be more effective in reducing rates than the subsidy has been. The subsidy is not impartial in the assistance given to carriers or to users of transportation. In fact, it is discriminatory and inequitable in its application to both. It may give unfair market advantage to some regions over others. It appears inappropriately applied to a region with production and prospects as great as the Sudbury-Armstrong-Lakehead region when considered in relation to other areas in Canada. It is a most difficult policy to administer in view of the discrimination and unfairness inherent in its application.

In the light of these considerations we recommend that the "bridge" subsidy be abolished.

### 3. FEED FREIGHT ASSISTANCE

The movement of feed grains and certain other feed products from the Prairie Provinces to Eastern Canada and British Columbia is assisted by the payment of a federal subsidy from the Appropriations Fund. This subsidy is paid to the consignee feed dealers or brokers. To obtain it, these merchants must submit claims certifying that the full benefit of the subsidy has been passed on to the livestock or poultry feeders who buy the grain for feeding. In practice, feed dealers quote such feed prices on the basis of "government subsidy already deducted".

Feed freight assistance began as a wartime measure to aid farmers in procuring Prairie feed grains in greater quantities and to keep down their costs of production so that war needs for meat and poultry products might be met. The Federal Government in January, 1941, agreed to pay one half of the regular freight charge on feed moved to the eastern provinces provided the provincial government concerned paid the remainder of the freight costs. Ontario was the only province to take advantage of this offer, although the Maritime Provinces had been very anxious to have part of the freight costs removed because of the high cost of moving feed grains from the Prairie Provinces to the extreme east of the country.<sup>79</sup>

In the fall of 1941 representations were made to the Federal Department of Agriculture by certain provincial governments in Eastern Canada that feed supplies were insufficient to meet requirements. It was urged that the Federal Government take more action to assist eastern farmers to obtain western feed grains and mill feeds at prices which would permit them to maintain livestock and poultry production. Price controls, which had been instituted in the fall of 1941, were also a factor in limiting their supplies.

On September 25, 1941, the Minister of Agriculture recommended to the Privy Council that he be authorized to pay one-third of the regular freight charges on carload lots or steamship cargoes of western feed grains and mill feeds shipped after September 30, 1941, and distributed as feed before July 1, 1942, under authority of The War Measures Act. To qualify for assistance this feed grain had to be loaded in Port Arthur or Fort William for shipment to destinations in Eastern Canada and it had to be used exclusively as livestock feed in Eastern Canada.

This arrangement, authorized by P.C. 7523 of September 25, 1941, soon proved to be unworkable. Since the amount of the assistance was lowest for water transport, buyers showed a preference for ordering their supplies by rail from the Lakehead in the quantities they required from day to day. A general dislocation of existing trade distribution facilities occurred. The scheme tended to divert the feed grain traffic away from the more economical mode of transport — the lake vessel.

The result was that, on October 16, 1941, the Minister of Agriculture placed another report before the Committee of the Privy Council stating that certain provincial governments had asked for help for their livestock feeders in obtaining western feed grains and mill feeds at prices which would permit them to maintain production to meet wartime requirements. This second report noted also that the fullest use could not be made of the feed involved when shipped by water to port terminals; that the disposition of such feed was limited insofar as consumers were concerned because the former Order in Council did not apply to mixed car movements nor with uniform equity to local movements and that consequently it dislocated existing trade distribution facilities; and that because of difficulties in administration and accounting in applying the freight assistance policy on a direct "one-third of actual transportation costs" basis, it would be preferable to pay such assistance on a "more uniform and more readily calculated basis".

<sup>79</sup> Debates, House of Commons Session 1950, Vol. IV, p. 3559.

Accordingly, this report recommended that the Minister of Agriculture be authorized to pay freight assistance on western wheat, oats, barley and rye, on bran, shorts, middlings and on Nos. 1 and 2 feed screenings, transported by rail or boat from Port Arthur, Fort William or Armstrong to destinations in Canada east of there, if distributed as livestock feed for Canadian livestock or poultry before July 1, 1942. The rate of assistance was to be \$4.50 per ton when the destination was within the Montreal freight rate zone. The Montreal rate zone then included nearly all of the Province of Ontario east of the Lakehead and up to the Ottawa River, as well as Quebec points slightly east of Montreal. For destinations beyond the Montreal zone the assistance was to be increased to cover also the total additional rail freight charges on a through carlot basis. The Committee of the Privy Council concurred in these new recommendations and they became operative under P.C. 8067 of October 20, 1941. They replaced those of Order in Council P.C. 1941-7523.

The new subsidy plan was better adapted to market and transportation conditions than the former plan of a month earlier. It was easier to administer and less disruptive of established channels for feed grain movements. With modifications from time to time to extend its application or to adapt the assistance to changing conditions, the new scheme as defined in P.C. 1941-8067 has been in effect from that time on.

Yet it should be noted that both the September and October plans provided for the assistance to end by the following June 30, 1942. For a number of years thereafter the subsidy was on a temporary basis, subject to Parliamentary approval each year. Later, however, it became accepted by Parliament as a relatively permanent policy although expenditures are still made out of the Appropriations Fund.

The scope of this freight subsidy plan for feed grains was later extended to include British Columbia and Newfoundland.<sup>80</sup> Its total cost to the Federal Treasury in the 1960-61 fiscal year was almost \$20 million, and involved the movement of 2.5 million tons of feeds, distributed by provinces as shown in Table VII.

TABLE VII  
FEED FREIGHT ASSISTANCE, YEAR ENDING MARCH 31, 1961

	Volume	Assistance paid
	(tons)	(\$)
Ontario .....	1,043,604	4,228,269
Quebec .....	992,693	7,900,151
New Brunswick .....	85,528	146,310
Nova Scotia .....	147,604	2,132,463
Prince Edward Island.....	28,364	433,866
Newfoundland.....	19,510	503,805
British Columbia .....	223,665	1,842,374
Total.....	2,540,968	19,184,242

#### Application of the Subsidy

Broadly, the feed freight assistance contributes in varying amounts to equalizing the cost of Prairie feed grains used for livestock and poultry feeding in other areas across Canada. For most

<sup>80</sup> See Appendix A, p. 126, for consolidation of Orders in Council covering feed freight assistance as it applied up to May 9, 1960.

of the points in Ontario east of the Lakehead, and for some in Quebec,<sup>81</sup> the subsidy on rail shipments is in general \$5.00 a ton, in other words, less than the freight rate from the Lakehead.<sup>82</sup> For British Columbia the subsidy covers the freight rate less \$5.00 a ton, in general, for approved feed grain shipments from the Prairies and the Peace River area to mainland British Columbia.

For areas outside of these two zones the subsidy normally covers a larger proportion of the freight charges. Thus for the Maritimes and Newfoundland the subsidy usually covers all of the additional freight charges east of the Montreal zone. Similarly, in British Columbia the full additional coastal water carlot shipping charges are paid for coastal shipments beyond railhead.

This, in broad terms, illustrates how the feed freight assistance is applied. To this general application there are, of course, many exceptions related to alternative water movements, shipments partly by rail and partly by water, particular freight rate conditions, outlying areas in Northern Ontario and Quebec, and many others. General freight rate changes from time to time have also affected the application of the subsidy and it has been modified several times to adjust for such changes. In May, 1960, for example, the assistance rate on all-water movements of feed grains to the Maritimes was reduced to \$11.00 a ton; formerly it had been the same as for rail shipments.

The contribution of the subsidy in relation to total transportation charges on western feed grains moving to Eastern Canada is indicated, for 1960, in Table VIII, for various transportation routes that may be used.

TABLE VIII  
FEED FREIGHT ASSISTANCE AS A PERCENTAGE  
OF FREIGHT CHARGES, 1960

Destination	All-rail routing	Ex-water		All-water routing
		Via	Per cent	
St. John's .....	82	—	—	—
Halifax <sup>1</sup> .....	71	Prescott	84	150
Truro <sup>1</sup> .....	71	Prescott	84	—
Truro .....	—	Halifax	100	—
Middleton .....	72	—	—	—
Port Williams .....	72	—	—	105
Moncton .....	70	—	—	—
Shediac .....	—	—	—	145
Pointe du Chêne .....	—	—	—	145
Rimouski .....	70	Quebec	106	—
Compton .....	56	—	—	—
Nicolet .....	52	—	—	—
Berthierville .....	46	—	—	—
St. Hyacinthe .....	47	Montreal	100	—
Montreal .....	38	—	—	100
Prescott .....	38	—	—	160
Ottawa .....	38	Prescott	80	—
Toronto .....	38	—	—	167
Goderich .....	38	—	—	260
Stratford .....	38	Goderich	110	—

<sup>1</sup> In 1961, competitive rates were instituted for these movements and altered these relationships.

<sup>81</sup> This area is defined in the pertinent Order in Council as the Montreal freight rate zone, but the boundaries of this zone are not now precisely determined. In the application of the subsidy this zone now comprises the territory east of the Lakehead in which the freight rate is the same as the rate from the Lakehead to Montreal. This territory in 1961 included points from about Longlac, Ontario, east to Levis, Quebec, but it excluded points like Sherbrooke, Quebec, for example.

<sup>82</sup> Subsidy rates quoted are those in effect in 1960. Some of these have been increased since then.

In the case of British Columbia, the subsidy on feed shipments contributes about the same proportions. From Calgary to Vancouver, for example, it covered about 62 per cent of the freight charges in 1960.

### Effects of Feed Freight Assistance

As could be expected with a subsidy which eventually became fitted, in its application, to a changing structure of transportation and a changing freight rate pattern, numerous inconsistencies of application developed in the feed freight subsidy. Numerous instances of these have shown up in the course of our investigations. Some of them are related to the difficulties of administering a subsidy of this kind in such a way that it will, for example, encourage the lowest cost carriers to be utilized, provide an equitable distribution of assistance among producers and permit prompt adjustments to the rapidly changing transportation environment.<sup>83</sup>

Yet while these administrative difficulties are inherent in subsidies of this nature, our concern is primarily with the effects of the subsidy on National Transportation Policy. In this respect the feed freight subsidy, like others that we have noted, has certain features which operate against efficient use of transportation resources. It discriminates, for example, against highway transportation. Only in the case of the Bay Ports and certain Great Lakes points can the subsidy be used to assist the furtherance of grain shipments to consignees by truck.<sup>84</sup> Elsewhere the subsidy that might remain after rail or water charges are paid and could be applied to truck haulage, is normally not appropriated. Truck competition for such feed grain haulage is thereby inhibited and transportation resources tend to be diverted from their most productive uses.

Shipments of feed grains to British Columbia move under domestic commodity rates. For many years, until July 1, 1951, the rate on grain for domestic consumption from Calgary to Vancouver was 30 cents per hundredweight. By July 31, 1959, the rate had risen to 70 cents, or 233 per cent above the 1950 rate. This has since been rolled back to 66 cents. Unlike shipments to Eastern Canada, these feed grain shipments to British Columbia do not benefit from Crowsnest Pass grain rates applicable to certain domestic shipments. It would appear that the increases in the feed grain freight rates to the West Coast have been supported by the existence of the feed freight subsidy and especially by the particular terms of its application. The regulations provide that the feed must move overland by rail and over routes in Canada all the way. There is no subsidy if trucks are used; nor can the threat of lower cost routings through the United States be used to moderate the freight rates. The subsidy makes the feed grain movement captive to the rails over land. On the other hand, because the shipper pays only a flat \$5.00 per ton (basis Calgary origin) no matter how high the freight rates go, there have been no complaints of the rates being unjust or unreasonable. In these circumstances, the subsidy has tended, as the rates increased, to become more of a subsidy to a particular mode rather than to the livestock feeder.

It is significant also for the use of transportation resources that the effect of the subsidy has been to encourage the haulage of raw materials rather than the more finished products. In this respect the effects of the subsidy are extensive. Some examples to illustrate this have been compiled in Table IX, Comparison of Shipping Charges (Appendix A, p. 128). These point to the tendency of the subsidy to encourage shipments of feed grain rather than dressed meat or, in some cases, livestock. The examples shown are made as comparable as possible by having the freight costs apply respectively to the amount of grain required to produce 100 pounds of gain in live animals; 100 pounds of live animal; and the carcass equivalent of 100 pounds of live animal.<sup>85</sup>

<sup>83</sup> In some areas, for example, agreed charges have recently been instituted for part of the haul, thereby disturbing the former pattern of movement and realigning the incidence of the subsidy.

<sup>84</sup> It was also on feed grain shipments from these ports that the railways instituted agreed charges.

<sup>85</sup> For example, eastbound freight rates for meat are based on the rate for live animals to Winnipeg (for slaughter) and the carcass equivalent from Winnipeg to eastern destination.

This indicates, for instance, that when the freight charges for moving 100 pounds of live cattle from Moose Jaw to Montreal are \$2.20, for moving 51 pounds of beef carcass (equivalent to 100 pounds live) are \$1.80, and for moving 500 pounds of feed (enough to produce 100 pounds gain in live cattle) are \$2.25 without feed freight assistance but only \$1.00 with the subsidy, then evidently the subsidy tends to make it preferable to transport the feed rather than the beef or the livestock.

Examination of the data in Table IX (p. 128) also indicates that, considering only the transportation factor, the feed freight assistance has been instrumental in making it cheaper to ship feed grain to Nova Scotia rather than to transport pork or beef or livestock there from the Prairie Provinces. It has made it preferable to ship feed for cattle to the Montreal area rather than ship the beef or livestock. It has made it preferable to ship feed for cattle to the Stratford area rather than to ship beef. It has made it less costly to produce pork, eggs and poultry products in the Vancouver area than to ship them from Calgary. In all of these instances it would have been more favourable, under current rates, to ship the livestock products from the Prairies to the consuming areas concerned, in the absence of the feed freight subsidy.

In the case of pork, with or without the feed freight assistance it would have cost less to feed western grain in the Montreal area than to ship the hogs or pork from the Prairies. In this instance, the feed freight assistance has no effect as far as location of production is concerned. A similar situation would prevail with respect to hogs in the Stratford area. It would also have been preferable even without the subsidy to ship the western grain from Yorkton to Stratford rather than live cattle (\$1.95 for feed versus \$2.10 for cattle). To illustrate the changing pattern of freight rates, the relation may be noted between the cost of shipping meat (pork \$1.75, beef \$1.55) and the cost of shipping livestock (\$2.10). The inauguration of refrigerated truck service from Alberta to Eastern Canada in 1959 brought the freight rates on meat down well below the rate for livestock.

In addition to these distortions injected into the movements and transportation cost relationships of these raw feed materials and final meat products, there is also to be considered the distortion of relationships among various feed inputs. For instance, when feed barley sells for \$44.00 per ton at the Lakehead and the freight charges to Montreal bring the price to approximately \$49.25, the feed subsidy on transportation would reduce the Montreal price to \$44.25 per ton. In these circumstances, United States corn could probably be purchased at \$46.50 per ton, duty paid Montreal. Thus to the extent that barley and corn are substitutes for each other in feed rations, the feed freight assistance tends either to keep out United States corn or to keep the price of barley up, or both. On the other hand, it seems to us that the subsidy has stabilized the supplies of feed grain for livestock feeders and may thereby have reduced somewhat the price uncertainty faced by these farmers. Yet while there has been a tendency for feed grain prices to fluctuate somewhat less than prices of the concentrates and other additives now included in feed mixes,<sup>86</sup> grain is one of the least costly ingredients of a commercial ration. As a result, the subsidy benefit when spread through the cost of the complete feeds, many of them relatively high in cost, is diluted in its significance to the feeder.

These effects of the subsidy in minimizing the risk of short supplies and reducing and stabilizing prices of feed grain have probably enabled eastern Canadian and British Columbia feeders to develop and plan their future programmes better. Because of this, at least in part, feeders have come to rely on western grains, even to the point of switching considerable acreages previously devoted to local production of feed grains to grasses for pasture and ensilage. Yet, while the reduction of risk is highly important in any enterprise, in this case it may well have been gained as effectively

<sup>86</sup> The grain cost is in the neighbourhood of \$45.00 to \$50.00 per ton while the complete commercial rations sell at about \$80.00 per ton. But grain comprises more than 50 per cent of most feed mixes, and runs to 80 or 90 per cent or more for important volumes.

by using the annual \$20 million subsidy in the construction of grain storage warehouses strategically located in the feeding areas, where dependable supplies could be maintained as required.

Consideration of the effects of the feed grain subsidy would not be complete without an examination of the notable changes and trends in the production of livestock and feed grain crops in those regions where the subsidy has application. These changes are set out in tables and summaries relating to the various regions in Appendix A, Data Pertinent to the Study of Feed Freight Assistance, page 129. We are convinced that the subsidy has contributed substantially to many of these changes.

#### Considerations Relative to the Subsidy

It has not been possible in this brief assessment to examine all of the extensive implications of the feed grain subsidy for transportation and resource allocation in Canada. But it is apparent from our investigations that this should be the subject of much more, and continuing, study to remedy and prevent its adverse effects on transportation efficiency and to relate the burgeoning effects of this policy to its objectives.

The subsidy, being tied primarily to rail, has inhibited the movement of feed grains by lower cost water carriers. With a few exceptions, the subsidy has prevented the growth of rate competition by trucks in the movement of feed grains. It has largely eliminated the moderating effect on rail freight rates of the competition of United States railways. It has stimulated the movement of raw materials (feed grains) at the expense of weight-losing finished products (dressed meat and livestock). All of these adversely affect the efficiency of the use of transportation in Canada and the allocation of transportation resources. It may be noted, however, that the growth of competition by long-haul trucking has offset some of these adverse effects. As a result of improvements in refrigerated trucking, better roads and sturdier vehicles, the costs of dressed meat transport have been reduced. In spite of the feed freight assistance it is becoming more and more advantageous to raise and slaughter livestock in Western Canada and ship the dressed meat to Eastern consuming areas than to ship the Prairie feed grains for livestock feeding in the East.

The subsidy has not been, and seems unlikely to be, successful in eliminating the long-standing shortage of farm animal protein in the Maritime Provinces. Per capita meat output there is now less than when the policy was introduced. But the production of poultry products in the Maritimes has expanded greatly and this can be attributed, in part at least, to the subsidy benefits. On the other hand, in Eastern Canada production of feed grains has declined sharply since 1941 and this can also be related partly to the subsidy. At the same time, feed freight assistance has widened the market for Prairie feed grains.

Overall it would appear that the subsidy discriminates in favour of the livestock and poultry producers in Eastern Canada and the feed grain producers in Western Canada. Conversely it discriminates against the livestock and poultry producers of Western Canada and the feed grain growers in Eastern Canada. In evidence presented before us, the Ontario Federation of Agriculture stated that the feed freight assistance is effective in keeping Ontario-grown corn out of the Eastern Canada market east of Montreal and that prices have been artificially depressed.<sup>87</sup> The Federation asked for treatment of Ontario grains similar to that received by Western grains. In this respect, we cannot accept the principle that a new subsidy should be instituted in order to offset the effects of an old one.

<sup>87</sup> Transcript of evidence, Hearings, March 15, 1960, Vol. 43, p. 7398.

The economic environment has altered greatly since the feed grain subsidy was first inaugurated. It is significant that with the extensive mixing of high-cost concentrates, antibiotics, vitamins, etc., in feeding rations, which has developed in recent years, the relative contribution of the subsidy to the farmer-feeder's costs has been greatly diluted. The benefits to the farmers have been reduced also by the shifts in the incidence of the subsidy over time — part going to transporters in higher rates, part to dealers in higher prices and so on. The location of the comparative advantage in livestock and feed grain production has also shifted markedly since 1941 as a result of the mechanization of agriculture and other technological improvements in the industry. Markets for animal protein products have also changed, with export markets much less significant and domestic markets more highly concentrated in Central Canada.

These major changes in the environment of agriculture, transportation and other aspects of the economy warrant a reconsideration of the objectives of the subsidy and of its effects. Its World War II objectives, to ensure an adequate supply of meat and poultry products for wartime needs, no longer apply. Moreover, the reasons for continuing the policy since that time have not been clearly defined and the limits of its application have consequently been uncertain. Without such clearly defined application its administration has become correspondingly difficult and, in many cases, based on temporary expedients.

Our recommendations with respect to feed freight assistance are made on the basis of the above considerations.

1. The subsidy should not be restricted to rail and water carriage.
2. The assistance rate should not be higher than the freight rate available from the least-cost carrier, no matter which mode of transport nor which routing is actually used.
3. The assistance rates on shipments to British Columbia should be based on the same formula as that used for Eastern Canada.
4. The Federal Government should make a detailed reassessment of the feed freight assistance policy in order to determine whether or not in its present form it is still benefiting Canadian agriculture to the greatest possible extent, or whether assistance could be more effectively applied to, for example, additional storage capacity in the feeding areas or some other form of aid.

## APPENDIX A

**REGULATIONS RESPECTING THE PAYMENT OF FREIGHT  
ASSISTANCE ON WESTERN GRAINS AND MILLFEEDS  
SHIPPED INTO EASTERN CANADA AND BRITISH COLUMBIA<sup>88</sup>**

**Eastern Canada**

1. The Minister of Agriculture is authorized to pay freight assistance on:
  - (a) Western wheat, oats, barley, rye, wheat bran, wheat shorts, wheat middlings, No. 1 Feed Screenings and No. 2 Feed Screenings, shipped or transported by rail or boat from Fort Churchill, Manitoba, Port Arthur, Fort William or Armstrong, Ontario to destinations in Canada east thereof and distributed for use exclusively as feed in Canada for Canadian livestock or poultry;
  - (b) wheat bran, wheat shorts and wheat middlings milled in Western Canada, or milled in Eastern Canada from Western wheat shipped or transported from Fort Churchill, Manitoba, Port Arthur, Fort William or Armstrong, Ontario to port elevators or flour mills in Canada east thereof when such bran, shorts or middlings are distributed from the manufacturing mill for use exclusively as feed in Canada for Canadian livestock or poultry;
  
2. (1) The payment of freight assistance authorized pursuant to section 1 shall be as follows:-
  - (a) on all rail shipments to destinations in Northern Ontario the payment shall be the actual carlot rail freight charges but not exceeding \$5.00 per ton;
  - (b) on all shipments to destinations in Ontario, except Northern Ontario, the payment shall be \$5.00 per ton;
  - (c) on all shipments to destinations in Quebec and Newfoundland, and on shipments by rail from Western Canada, Ontario or Quebec, to destinations in New Brunswick, Nova Scotia and Prince Edward Island, the payment shall be:-
    - (i) where the destination is within the Montreal freight rate zone - \$5.00 per ton;
    - (ii) where the destination is beyond the Montreal freight rate zone and has a through carlot rail freight rate from Fort William, or a combination rate at time of shipment composed of the rate from Fort William to the Montreal freight rate zone plus the lowest local rate from a point in the Montreal freight rate zone to destination, less than 96 cents per hundredweight - \$5.00 per ton plus the per ton charges calculated in accordance with subsection (2);

<sup>88</sup> As authorized by Order in Council P.C. 1958-1628, dated the 27th day of November 1958 and effective the 1st day of December 1958, as amended by Order in Council P.C. 1959-61, dated the 22nd day of January 1959, effective that day, as amended by Order in Council P.C. 1959-984 dated the 30th day of July 1959 and effective August 1st, 1959, as amended by Order in Council P.C. 1960-564 dated the 29th day of April, effective May 9th, 1960, as amended by Order in Council P.C. 1960-596, dated the 3rd day of May 1960, and effective May 9th, 1960.

- (iii) where the destination is on the lines of the Quebec Central Railway Company, with the exception of Daquam and Lac Frontière — \$5.00 per ton plus the per ton charges calculated in accordance with subsection (2);
  - (iv) for other destinations — \$7.00 per ton plus the per ton charges calculated in accordance with subsection (2);
  - (d) on all shipments by boat from Ontario or Quebec to destinations in New Brunswick, Nova Scotia or Prince Edward Island, the payment shall be \$11.00 per ton.
- (2) The per ton charges referred to in paragraph (c) of subsection 1 shall be based on the lower of the following:-
- (a) the remainder of the through carlot rail freight rate from Fort William to destination in excess of the through carlot freight rate to the Montreal freight rate zone; or
  - (b) the lowest local carlot freight rate from a point in the Montreal freight rate zone to destination.

#### **British Columbia**

3. The Minister of Agriculture is authorized to pay freight assistance on:
- (a) Western wheat, oats, barley, rye, corn, No. 1 Feed Screenings and No. 2 Feed Screenings, wheat bran, wheat shorts and wheat middlings, shipped from points of origin in the Provinces of Alberta, Saskatchewan, Manitoba and that part of British Columbia known as the Peace River District, to destinations in British Columbia and distributed for use exclusively as feed in British Columbia for Canadian livestock or poultry;
  - (b) wheat bran, wheat shorts and wheat middlings milled in British Columbia from Western wheat, shipped from points of origin as designated in paragraph (a), and distributed as designated in paragraph (a);
4. The payment of freight assistance authorized pursuant to section 3 shall be as follows:-
- (a) on rail shipments, \$5.00 per ton less than the lowest of the carlot short line rail freight charges through Canada from Calgary, Edmonton or the point of origin.
  - (b) on combined rail and coastal water shipments, the freight assistance designated in paragraph (a) plus the coastal water carlot shipping charges, provided that if the final destination is served by rail the freight assistance shall be based on the through rail rate.
5. On all grains and feeds shipped and distributed in accordance with the provisions of this Order, evidence satisfactory to the Minister must be produced to show that the sale price to consumers of such products has been reduced by and takes into account the payment of freight assistance as herein prescribed.

### Comparison of Shipping Charges

TABLE IX  
COMPARISON OF SHIPPING CHARGES ON FEED GRAIN,  
LIVESTOCK, MEAT AND EGGS<sup>1</sup>

Area and routing		Feed, without assistance (for 100 lb. gain, live)	Hogs live	Cattle live	Meat live equivalent	Feed, with assistance (for 100 lb. gain, live)
		(in dollars per 100 lb. live equivalent)				
Yorkton-Truro (Feed, via Lakehead and Prescott)	hogs	4.38	2.41		2.45	1.28
	cattle	5.48		2.41	2.10	1.60
Moose Jaw-Montreal (Feed, lake from Fort William)	hogs	1.80	2.20		2.10	0.80
	cattle	2.25		2.20	1.80	1.00
Yorkton-Stratford (Feed via Goderich)	hogs	1.65	2.10		1.75	0.65
	cattle	1.95		2.10	1.55	0.70
Calgary-Vancouver	hogs	2.65	1.25		1.15	1.00
	cattle	3.30		1.25	0.95	1.25
<b>Eggs:</b>				<b>Eggs:</b>		
Calgary-Vancouver (30 doz.)		1.00		0.87		0.35

The data used in the calculations for Table IX were those applicable in early 1960. The feed-gain and other conversion rates for livestock and poultry and the applicable freight rates used in these calculations are as follows:

#### Conversion Rates

400 lb. feed grain required to produce 100 lb. gain in live hogs

500 lb. feed grain required to produce 100 lb. gain in live cattle

150 lb. feed grain required to produce 30 doz. eggs

62.5 lb. pork carcass is equivalent to 100 lb. live hog

51 lb. beef carcass is equivalent to 100 lb. live cattle

#### Freight Rates

FEED:	Moose Jaw to Lakehead	20 cents per 100 lb.
	Yorkton to Lakehead	19 cents per 100 lb.
	Lakehead to Prescott	16½ cents per 100 lb.
	Prescott to Truro	74 cents per 100 lb.
	Lakehead to Montreal	25 cents per 100 lb.
	Lakehead to Goderich	10 cents per 100 lb.
	Calgary to Vancouver	66 cents per 100 lb.

#### HOGS AND

CATTLE:	Moose Jaw to Winnipeg	70 cents per 100 lb.
	Yorkton to Winnipeg	50 cents per 100 lb.
	Moose Jaw to Montreal	\$2.20 per 100 lb.
	Yorkton to Truro	\$2.41 per 100 lb.
	Yorkton to Stratford	\$2.10 per 100 lb.
	Calgary to Vancouver	\$1.25 per 100 lb.

MEAT:	Winnipeg to Truro	\$3.09 per 100 lb.
	Winnipeg to Montreal	\$2.22 per 100 lb.
	Winnipeg to Stratford	\$2.00 per 100 lb.

EGGS:	Calgary to Vancouver	87 cents per 30 doz.
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### Data Pertinent to the Study of Feed Freight Assistance

#### The Maritimes

In the Maritime Provinces there has long been a deficiency in the quantity of animal protein foods, other than seafoods, produced relative to the quantity consumed. But it is evident from the developments there during the two decades since feed freight assistance began that this condition has not been remedied. Table X (below) shows that while human population of the Maritimes has increased by more than 25 per cent from 1941 to 1960, grain-consuming units (a measure of meat production) have fallen by more than 16 per cent. At the same time, the acreage of feed grain crops has fallen by almost 32 per cent, indicating increasing dependence on western feed grains and the benefits of the subsidy. On the other hand, the Maritime poultry industry has thrived under the feed grain assistance policy.

TABLE X

DATA PERTINENT TO THE STUDY OF FEED FREIGHT ASSISTANCE TO THE MARITIME PROVINCES

Year	Population thousand	G.C.A.U. <sup>1</sup> thousand	Farm Output						Acreage <sup>2</sup> in feed grains thousand acres	Western feed rec'd thousand tons	Freight subsidy thousand dollars			
			thousand head			million pounds	million dozen	million pounds						
			Cattle- calves	Hogs	Sheep									
1940	1,116	829	—	—	—	1,017	—	—	540	—	—			
1941	1,130	806	208	277	120	1,040	16.9	10.8	472	37	289			
1942	1,145	859	194	296	110	1,114	19.2	13.0	468	231	1,825			
1943	1,160	875	162	306	117	1,124	22.4	13.2	482	351	2,768			
1944	1,163	917	172	341	140	1,120	26.3	15.1	463	338	2,667			
1945	1,178	865	210	292	133	1,137	26.8	14.7	450	350	2,759			
1946	1,180	827	208	241	129	1,099	25.0	16.5	418	409	3,223			
1947	1,197	836	207	252	112	1,080	26.1	18.5	433	394	3,096			
1948	1,216	760	170	286	104	1,076	24.3	13.7	418	332	3,020			
1949	1,231	778	150	258	90	1,093	22.0	16.0	420	222	2,501			
1950	1,246	761	178	317	84	1,053	21.6	13.5	426	244	2,670			
1951	1,257	765	150	309	72	1,047	23.0	14.7	446	248	2,823			
1952	1,279	762	126	338	73	1,024	26.5	18.1	408	267	3,192			
1953	1,297	721	151	253	76	1,095	28.6	19.2	406	231	2,965			
1954	1,314	752	154	254	80	1,132	32.2	22.5	399	234	3,009			
1955	1,330	723	152	233	81	1,124	31.4	18.0	371	251	3,238			
1956	1,349	718	164	218	82	1,120	33.9	16.0	350	247	3,180			
1957	1,366	693	184	199	84	1,097	32.5	17.0	328	225	3,155			
1958	1,387	683	180	221	82	1,102	32.6	20.2	334	235	3,375			
1959	1,408	706	157	277	81	1,101	35.5	18.8	337	—	—			
1960	1,426	673	146	277	81	1,063	35.7	19.8	326	—	—			

<sup>1</sup>Grain-consuming animal units on farms at June 1

<sup>2</sup>Oats, barley, mixed grains.

#### Quebec

Quebec farmers normally use slightly less volume of subsidized Prairie feed grains than Ontario but because of their greater distance from the source, more subsidy (about 40 to 45 per cent of the total) is paid on shipments to Quebec (Table VII, p. 120).

In Quebec, feed grain acreage has dropped 21 per cent since the subsidy began (Table XI, below). At the same time, grain-consuming animal units have increased over 10 per cent. Yet this is far short of the increase in consumer population — over 53 per cent from 1941 to 1960.

No doubt the feed freight assistance has also contributed to the notable increase in milk output per cow in Quebec. Milk production increased almost 54 per cent from 1941 to 1960 with virtually no increase in the number of milk cows. Expansion of poultry, eggs and hog production has also been substantial.

TABLE XI

DATA PERTINENT TO THE STUDY OF FEED FREIGHT ASSISTANCE TO THE PROVINCE OF QUEBEC

Year	Population	G.C.A.U. <sup>1</sup>	Farm Output					Acreage <sup>2</sup> in feed grains	Western feed rec'd	Freight subsidy	
			Cattle- calves	Hogs	Sheep	Milk	Eggs				
	thousand	million	thousand head			billion pounds	million dozen	million pounds	million acres	thousand tons	thousand dollars
1940	3,278	3.0	—	—	—	3.9	—	—	2.0	—	—
1941	3,332	2.9	776	1,202	204	4.1	39	30	1.9	135	721
1942	3,390	2.9	897	1,135	220	4.4	43	34	1.9	724	3,852
1943	3,457	3.0	672	1,252	228	4.5	45	33	1.9	1,038	5,523
1944	3,500	3.2	729	1,376	233	4.6	57	43	1.9	1,114	5,927
1945	3,560	3.0	905	1,220	312	4.8	59	42	1.8	1,149	6,118
1946	3,629	2.9	780	1,045	291	4.6	53	38	1.6	1,320	7,025
1947	3,710	3.1	734	1,240	263	4.6	61	46	1.6	1,375	7,315
1948	3,788	2.8	833	1,290	265	4.5	59	38	1.6	1,145	7,055
1949	3,882	2.9	803	1,217	199	4.5	55	46	1.7	967	6,591
1950	3,969	2.8	827	1,429	178	4.4	50	44	1.7	920	6,845
1951	4,056	3.0	749	1,499	154	4.5	49	47	1.7	917	7,191
1952	4,174	3.2	605	1,923	141	4.8	55	69	1.6	1,040	8,407
1953	4,269	2.9	700	1,341	175	5.1	55	71	1.6	859	7,395
1954	4,388	3.0	768	1,281	173	5.3	63	68	1.6	1,002	8,289
1955	4,517	3.0	802	1,441	165	5.6	61	68	1.5	1,034	7,345
1956	4,628	3.0	810	1,430	162	5.7	60	71	1.5	1,074	7,530
1957	4,758	3.1	887	1,286	161	5.9	64	76	1.5	935	7,425
1958	4,884	3.2	906	1,464	163	6.1	59	82	1.5	1,142	9,127
1959	4,999	3.4	815	1,892	147	6.0	64	96	1.5	1,194	10,165
1960	5,106	3.2	832	1,760	136	6.2	60	106	1.5	—	—

<sup>1</sup> Grain-consuming animal units on farms at June 1.<sup>2</sup> Oats, barley, mixed grains.

## Ontario

For Ontario, a greatly increased human population from 1941 to 1960 has not been matched by increases in livestock output. Cattle and calves have increased only slightly. Hogs show no significant change. Sheep are sharply down (Table XII, p. 131). Production of milk, eggs and poultry meat has increased substantially, however. Acreages sown to oats, barley and mixed grains have decreased relative to 1941 when the feed freight assistance programme began. But the acreage in corn has increased from 250,000 acres in 1941 to 480,000 acres in 1959.<sup>89</sup> At the same time

<sup>89</sup> Corn acreage rose to 565,000 acres in 1955.

yield per acre of corn has increased so that total production has gone up remarkably. In 1941 the corn yield totalled 11,500,000 bushels, and in 1958 it was 29,600,000 bushels. This indicates that corn in Ontario has been at less disadvantage than other feed grains relative to subsidized feed grains from the Prairies.

TABLE XII

DATA PERTINENT TO THE STUDY OF FEED FREIGHT ASSISTANCE TO THE PROVINCE OF ONTARIO

Year	Population	G.C.A.U. <sup>1</sup>	Farm Output						Acreage <sup>2</sup> in feed grains	Western feed rec'd	Freight subsidy		
			Cattle- calves	Hogs	Sheep	Milk	Eggs	Poultry meat	billion pounds	million dozen	million pounds	million acres	thousand tons
	thousand	million	thousand head										
1940	3,747	5.3	—	—	—	5.4	—	—	3.7	—	—	—	—
1941	3,788	5.2	1,044	3,068	321	5.5	96	88	3.5	170	764		
1942	3,884	5.2	999	3,025	313	5.8	107	95	3.4	738	3,319		
1943	3,915	5.2	979	2,746	331	5.6	120	101	2.6	1,448	6,518		
1944	3,963	5.2	962	2,963	345	5.5	126	103	2.9	1,303	5,862		
1945	4,000	5.1	1,100	2,557	391	5.7	139	106	2.6	1,376	6,191		
1946	4,093	5.0	1,064	2,365	334	5.4	133	107	2.7	1,498	6,739		
1947	4,176	5.3	954	2,860	319	5.5	154	112	2.1	1,655	7,446		
1948	4,275	4.7	1,133	2,657	308	5.2	141	98	2.8	1,246	6,446		
1949	4,378	4.8	1,046	2,742	234	5.3	116	129	3.1	996	5,420		
1950	4,471	4.6	1,000	2,906	202	5.1	120	123	3.0	835	4,785		
1951	4,598	4.7	910	2,668	176	5.0	115	153	3.0	762	4,374		
1952	4,788	4.6	901	2,700	176	5.2	139	167	3.1	905	5,152		
1953	4,941	4.5	1,072	2,290	198	5.4	145	147	2.9	826	4,693		
1954	5,115	4.6	1,150	2,060	202	5.5	157	155	2.9	846	4,785		
1955	5,266	4.6	1,212	2,210	207	5.6	155	151	2.8	827	3,810		
1956	5,405	4.7	1,240	2,425	202	5.6	163	169	2.5	1,130	5,087		
1957	5,622	4.9	1,233	2,375	178	5.7	186	170	2.5	1,017	5,003		
1958	5,803	5.3	1,254	2,470	186	6.0	193	194	2.6	1,101	5,506		
1959	5,952	5.5	1,127	3,299	180	6.2	197	211	2.7	—	—		
1960	6,089	—	1,148	3,060	186	6.2	—	—	—	—	—		

<sup>1</sup>Grain-consuming animal units on farms at June 1.<sup>2</sup>Oats, barley and mixed grains. See p. 257 for note on corn production.

### British Columbia

In the West Coast Province, livestock and poultry feeding is largely concentrated in the lower Fraser Valley. Unlike Eastern Canada, competing uses for the limited supply of agricultural land there, make the production of feed grains in the consuming area an uneconomic enterprise. As indicated above (Table IX, p. 128) the most economical way of getting animal protein foods, other than perhaps milk, to the coastal cities of British Columbia is to ship these products in from the feed grain producing areas rather than move the feed.



## TRANSPORTATION AND NATIONAL DEVELOPMENT

We have already pointed out in some detail the role that transportation has played in developing various parts of Canada. By means of massive public assistance in capital structures, by grants and other devices, government, often in partnership with private enterprise, has assured the provision of transportation facilities in areas where the potential volume of traffic was at that time insufficient to warrant the provision of facilities by ordinary commercial criteria. The results fully justified the means. It is true that in some cases more facilities were provided than the economy of the area could eventually support, but these were the results of over-optimism rather than a departure from principle.

There remain vast areas of Canada in which development is slight or completely lacking. If these areas are to develop they will require additional transportation facilities and the provision of these should, in proven resource locations and at appropriate times, stimulate settlement and economic activity just as they did in what are now more mature sections of the country.

This development is proceeding. The provision of air fields, navigational aids, weather information, roads to resources, harbour improvements and railways to new mines, are but some of the efforts of government to assist in providing transportation facilities in such areas. These efforts are in the judgement of the Commission soundly based from the standpoint of providing efficient transportation. The progressive use of transportation modes — the use of planes for reconnaissance in areas with development potential and for exploration of waterways where these are available, then the building of roads to facilitate the proving of mineral deposits and the exploitation and protection of forest resources, and finally, where tonnages warrant, the building of railways — seems to us to be a sensible sequence for transportation development in Canada to follow.

Two areas may be used to illustrate the role of transportation in resource development in Canada. The first of these is the Island of Newfoundland. This oldest settled part of Canada has special problems not faced by any other province. Being an island situated some distance from the mainland imposes special transportation burdens on its trade. Its population, traditionally dependent on the fisheries and sea transport, has been shifting rapidly from some 1,500 outports (in 1945), widely scattered around its 6,000 miles of coastline to the larger industrial centres. Its future development pattern appears clearly directed toward the forest, mineral and service industries of the interior. Its lack of adequate inland transportation has seriously retarded resource development.<sup>90</sup>

The second area consists of the northern parts of the existing provinces, particularly the Canadian Shield area, the Yukon and the Northwest Territories. Like Newfoundland, they are presently underdeveloped and have a similar resource base. While they have the advantage of land connection with mainland Canadian markets, they are far from the markets where most of their products must be sold and for the most part have harsher climatic conditions that add to the difficulties of development.

<sup>90</sup> See *Report of the Newfoundland Royal Commission on Agriculture*, St. John's, Queen's Printer, 1956, especially p. 324-330.

All of these regions have a development potential. The rate of development will depend on such economic factors as the demand for their resources, and on governmental policies having to do with establishing sovereignty, national defence and the desire to stimulate the over-all economy of the nation.

In the development of these areas transportation will play a major role and will require further substantial national financial assistance if development is to be accentuated. The use of transportation in assisting national development in these areas should be governed by the experience gained in the past, modified by the particular circumstances that exist in the present or that may be expected to exist in the future.

Excessive facilities, that even an expanded economy could not be expected to support, should not be provided. Planning must walk the narrow plank between undue optimism on the growth rate and the pessimism that leads to stagnation.

Any plan for transportation facilities in new areas should strive to achieve the greatest possible flexibility so that changes in transportation technology or in the economy being served can be accommodated with the least possible loss of capital. For example, the present technological superiority of the pipeline for moving oil may, under arctic conditions, be superseded by the cargo submarine. Similarly, an economy based on forest products may, in time, become an economy based on agriculture or *vice versa*. Flexibility is maintained by keeping fixed capital in facilities to a minimum. In general such a policy favours air and road transport more than rail and pipeline.

While the desire to maintain flexibility is one criterion determining the mode of transport, it is not the only one. The nature of the resource base is also important. Mineral products tend to be concentrated in specific areas (a mineral or an oil field) producing heavy tonnages that frequently must be moved long distances. Forest products on the other hand are gathered from extensive regions with low tonnages per unit area.

We have expressed the view that in the more settled parts of Canada the most efficient transportation system can be obtained by competition between and within the different modes. In the newer areas it is still possible, and in many cases desirable, to restrict competition. The lack of volume of production, the uncertainties of the developmental patterns of the area and the large capital requirements usually make restricted competition the most efficient mechanism. With this restriction of competition must go regulation to ensure that privileges are not abused.

The use of restricted competition also enables government to designate chosen instruments for implementing national policy. Grants in aid, the provision of capital structures and rate or operating subsidies, or both, to particular modes or individual carriers do no violence to economic principles in such an environment. Whether and to what extent such government action is taken depends on national policy objectives and not on national transportation policy.

In using transportation to develop unsettled areas railways will not play the dominant role that they did in earlier times. Nevertheless they will have a role to play. When rail lines are constructed, as we have pointed out in Chapter 5, the cost must either be borne by the traffic generated or by government subsidy. They should not be a burden on other shippers.

In connection with the use of railways in developmental areas it has been suggested to us that low "developmental" rates be put in by the railways to stimulate and secure the traffic with the expectation that increasing the volume of goods transported will improve the economy generally and thus the railways' financial position. Taking into account the type and extent of public assistance relevant to the movement, and setting the proper minimum rate on that base, it becomes a

matter of negotiation between the shipper and the railway as to whether or not such rates are implemented. If rates are below minimum legal levels they put a burden on other shippers or depress the railways' competitive position. Furthermore, railway management must always retain the right to judge the effect of any rate level on its overall financial position. It may be that in certain cases the traffic will not move even at minimum rate levels. If it is thought to be in the provincial or national interest that this traffic be moved then the shortfall in revenues should be made up by the government concerned.

As noted above, Newfoundland is one of the areas in Canada that requires further development and where transportation is being used and might be used more in developing the economy of the Province. It is in this setting that the Commission has examined the special problems of the Island from the standpoint both of existing transportation systems and what might be done by transportation to stimulate the economy.

### **Special Problems of Newfoundland**

The Commission has examined the transportation problems of the island portion of Newfoundland with great interest. Because of its geographical position and stage of economic development, it has peculiar transportation needs unlike the other settled parts of Canada.

The transportation facilities of the Island have been vastly improved since Confederation. The provision of ferry service, the renovation of the railroad and the construction of roads and highways has, no doubt, favourably affected the economy of the Province. However, the rail-ferry rail route from mainland Canada has proved to be a very expensive method of moving goods. Furthermore, despite the progress that has been made, the lack of adequate inland transportation continues to result in inadequate resource development and costly and unsatisfactory distribution of supplies.

These are the problems examined in this section.

### **Existing Transportation Facilities**

The transportation facilities in Newfoundland can be put into three broad categories. They are: facilities for exporting the products of the Island, facilities for importing goods from mainland Canada and finally the gathering and distributing of goods within the Province.

The exporting of goods need not concern this Report. Most of the products now produced and those likely to be produced in the next decade are destined for the markets of the world and present no problems that are within our Terms of Reference. Indeed, the many fine harbours and the closeness of the Province to world shipping lanes constitute an important economic advantage to this part of Canada that should enable it to compete successfully in markets of the world.

The importation of goods is unfortunately another matter. Because of its small population which discourages manufacturing and the scarcity of good agricultural land, Newfoundland must import a high percentage of its requirements of consumer goods, tools of production and food required for its people. Before Confederation, much of these goods were purchased in Great Britain and the United States and brought to Newfoundland by ships. When union with Canada was established the trading pattern changed to some extent because the Island then became subject to Canadian tariff laws. At the present time, it has been estimated that roughly 90 per cent of Newfoundland's imports come from mainland Canada.

A substantial portion of the goods continues to arrive on ships from Halifax and Central Canada. We made no special inquiries into this movement. Shipping companies informed us that they have great difficulty in meeting the rail rates because of the heavy subsidies given to the rail-ferry-rail route. The Commission did not inquire as to the reasons for the high costs that appear to be involved as compared with shipping in other countries. Undoubtedly, this is due to many factors and probably some of them are beyond the ability of the shipowners to deal with.

At the time of union, the Federal Government agreed to maintain an all-year transportation link between North Sydney and Port aux Basques. Apart from the physical facilities involved, this also required the publishing of through-rail rates from the mainland to points on the Newfoundland railway as though there was a continuous rail haul.

The physical facilities for the Cabot Strait ferry were provided by the Federal Government at a high capital cost. The operating deficit of this ferry, amounting at present to over \$5 million yearly, is also borne by the Federal Government.

The narrow gauge Newfoundland railway was taken over and made, in effect, a part of the Canadian National Railway system. Approximately \$66 million was spent in renovating the road, providing diesel locomotives and other improvements. The operating deficit, which has been running approximately \$6 million a year, has been taken into the overall system operations.

A typical movement of goods may proceed from Montreal by rail to North Sydney, a distance of approximately 1,000 miles. There the freight is unloaded and placed in containers for shipment across the Strait by ferry to Port aux Basques. At this point the containers are emptied and the freight put on the box cars of the Newfoundland railway to be delivered to points in the Province. Most of it goes to St. John's, 547 rail miles, because roughly two-thirds of the people in the Province live in that region. Thus a shipment of goods from Montreal must be handled four times, must travel over 1,500 miles by rail and 108 by water to reach St. John's. This is an exceedingly costly operation in itself without taking into account the pilferage and damage to which such an operation may be subject. This movement is largely a one-way movement and the lack of back hauls further increases the cost of the operation.

In addition to water and rail routes, a small but growing volume of high-valued goods particularly subject to damage are being carried to the Island by air freight.

Land transportation within the Island is limited. The narrow gauge railway between Port aux Basques and St. John's together with a few short branch lines and the Trans-Canada Highway now nearing completion and paralleling the railway throughout its length plus a beginning of a system of roads and highways are the only facilities. As a result of the lack of inland transportation the population tends still to concentrate on the shore line where water transportation is available. Distribution of goods to the coastal settlements is now carried out largely by the coastal steamers of Canadian National Railways. In spite of the limited service, unsatisfactory by modern standards, this is a very costly operation resulting in deficits of the order of \$3 million yearly.

#### **Transportation Policy for Newfoundland**

The situation in Newfoundland is a special case distinct from the rest of Canada. Because of the lower level of the economy as compared with the rest of Canada and because of its geography, transportation costs are high<sup>91</sup> and the people concerned cannot yet assume the full cost of moving

<sup>91</sup> In this section the term "costs" refers to the costs to the receiver. It includes rates charged by the transportation company, storage, inventory and any other costs involved in getting goods from the supplier until they reach the consumer. Thus for high-valued goods, transportation costs might be lowest if daily delivery by high-rate air transport was used. On the other hand, for low-valued goods, the cost might be lowest if low-rated water transport was used along with bulk storage.

goods from the mainland to the Island. Furthermore the total tonnage of goods to be moved is relatively small thus making it difficult to achieve the economies of scale which can be achieved in other areas. Under these circumstances, the objectives of transportation policy should be, in the short run, to develop, mainly by organization, the lowest cost transportation possible, so that, in the long run, a system can be developed that would enable the people concerned to pay the total cost involved. This is in contrast to the rest of Canada where we believe that low-cost transportation can best be achieved by competition. The situation in Newfoundland is such that it may prove necessary in the short run to limit competition, to favour by subsidization or special treatment one mode against another and to do other things that would be totally unacceptable in other parts of Canada.

There seems to be little hope of substantially reducing cost on the rail-ferry-rail route. It is inevitably a high-cost operation. However, some economies might be made. For example, the use of containers either from point of origin or some distributing centre such as Moncton holds promise, especially if it were co-ordinated with a ferry to St. John's, Argentia or Baie d'Espoir and a highway network within the Province. This approach appears to have greater promise than provision of a rail-car ferry and we accordingly recommend that everything possible be done to expedite the early experimental use of this modern technique.

As mentioned earlier, demand for transport from the mainland to the Island will increase. Since it is doubtful that the rail-ferry-rail route can ever become self-supporting, it is recommended that further capital expenditures on this route should be scrutinized most carefully before being authorized. Every effort should be made to find alternative, less costly means of transport.

The alternative modes are by water and by air. More shipments by water should be possible. Water carriers, with little subsidy, now compete vigorously for much of the traffic. They should be encouraged in every way possible.

For example, substantial shipments of feed grain are transported from the Lakehead to Newfoundland. At the present time these shipments comprise from 18,000 to 19,000 tons annually. It can be expected that the volume will increase in the future.

The Federal Government assists this movement by paying a freight subsidy of \$5.00 per ton plus the cost difference between rail charges Lakehead to Montreal (currently 66 cents per cwt.) and Lakehead to Newfoundland destination (e.g., currently \$1.72 per cwt. to St. John's). The assistance now ranges from \$19.20 per ton to \$28.20 per ton depending on the destination. Most of the feed grain goes to the St. John's area and this point receives the highest rate of subsidy. The buyer in St. John's, therefore, pays only \$6.20 a ton for transportation if the grain moves all-rail from the Lakehead (less if it moves part way by water), since the total rail freight is \$34.40 per ton.<sup>92</sup> Wheat can be shipped from the Lakehead to Halifax by water for about \$6.50 a ton and to Liverpool, England, for about \$10.35. There are no all-water rates to St. John's but they would be somewhat less than \$10.00 a ton on bulk movements. But such bulk movements of grain to Newfoundland ports would require storage facilities — probably space for as much as one million bushels. Under such an arrangement the Federal Treasury could limit its assistance to the total cost of all water transportation (a reduction from \$28.20 to about \$10.00 a ton) and the buyer would still have an additional \$6.20 per ton, approximately, which could be used to pay his storage and local haulage. Such bulk movements of grain would also release space on ferries for other commodities not susceptible to bulk movements.

<sup>92</sup> Routing via lake vessel to Montreal and then by rail to St. John's would cost about \$32.00.

Within this transportation context, the Commission strongly urges that immediate consideration be given to the construction of bulk grain storage facilities in Newfoundland with federal assistance.

While feed grain may be a somewhat exceptional case, there seems no doubt that there are other important products which appropriate government action could divert with advantage to water transport. Every effort should be made to discover areas where such economies could be made and, by appropriate changes in the administration of governmental policies or by other means, encourage their adoption.

Air transport also has possibilities for many valuable and perishable commodities. Newfoundland is well supplied with air terminal facilities and a substantial movement of goods by air already occurs. Increases in efficiency are occurring rapidly in this mode of transport and can be expected to continue. Evidence brought before us has led us to believe that a promising approach lies in the use of cargo planes flying from the Montreal-Toronto area to the Island. Another possible route is from Maritime mainland points to Newfoundland airports. On this route smaller planes could be used. Full loads would be essential, if low rates are to be obtained. These would tend to be assured if the airline operators were encouraged to enter into agreed charges with the shippers. A service of this nature might require that the carrier have a franchise for routes to the Island together with the necessary safeguards this implies. Air freight would require a measure of assistance to keep rates reasonable. It is probable that at least part of this could be recaptured from the subsidies now going to surface transport. But the greatest gain would accrue to private business in savings in time, loss and damage on perishable, fragile and valuable commodities shipped. Every encouragement and assistance should be given to any firm willing and able to offer such a service.

If traffic is re-routed by water or air, it would tend to reduce the extra costs of handling in ferry transhipments but might at the same time increase the losses on the Newfoundland section of the Canadian National Railways. For the present, there is probably only a small gain when we consider current traffic volumes. However, these volumes will increase and, unless alternate routes are used, present ferry facilities will have to be increased, with very heavy capital costs and with larger and larger operating deficits to be financed by government. It is to avoid this problem that the Commission urges consideration and action on the greater use of alternative modes.

In summary the movement of goods from mainland Canada to Newfoundland will have to be subsidized for the foreseeable future. Because of this, the Government should use its broad powers to see that insofar as possible all goods are moved at the lowest possible cost. Assistance, encouragement and incentives should be given all modes that promise by innovation and technical change to improve service and lower costs. This will hasten the day when the shippers and receivers can assume the full cost of their transportation requirements.

#### **The Use of Transportation to Stimulate the Economy**

No part of Canada has prospered until it had good transportation facilities. The history of Canada is replete with examples of massive public spending on transport facilities such as canals, railways and more recently highways and airports. Indeed the dollar value of such public investment continues to rise. There is no question that the economy of Newfoundland cannot develop at a satisfactory pace without more transportation facilities. The paucity of inland transportation is delaying the utilization of resources and, in effect, confining the population to the coastal areas.

At the present time the needs for inland transportation cannot be economically met by additional railway lines. The relatively short hauls and low tonnages make this type of transport uneconomical and particularly unsuitable for linking up the rather small communities. It is more likely that, with the development of other modes, some of the present railway lines can eventually

be discontinued. On the other hand the development of mineral resources may require new railway facilities. The need for such should be judged on the ability of the available tonnage to pay the costs involved, the same as in other parts of Canada.

The present transportation needs can best be met by a system of roads and highways throughout the Island. These should be planned in consultation with the potential users, especially users of forest products, and designed not only to link up existing settlements but also to open up the country so that the resources can be utilized. User charges should be levied which in many cases might meet most of the cost involved.

Such a system of roads would greatly lower the cost of distributing consumer goods and would be especially valuable in handling containers arriving by ship, rail or air. It would also allow for the phasing out of the coastal steamers operating at the considerable loss of nearly \$3 million a year.

A highway network of the size necessary is beyond the present resources of Canadians in Newfoundland. The situation calls for assistance by the Federal Government and there are enough precedents for such a programme. Public works to stimulate the economy of a province or an area have been a continuing part of national policy in Canada. For example, assistance in constructing power plants and irrigation systems as well as transportation facilities in all parts of Canada can be cited. What canals and locks did for the economy of the Central Provinces, what the transcontinental railways did for the Prairies, highways can do for Newfoundland.

We are convinced that such a programme is in the national interest. It would stimulate the economy of the Island with attendant benefits to the rest of Canada. All this could be accomplished in a short time with a relatively modest outlay of public funds.



## PART III

### NATIONAL TRANSPORTATION POLICY



## EPILOGUE

The Terms of Reference delineating the problems committed to this Commission proved to be far broader than we at first supposed. What appeared, at first definition, to be problems relating to railway transportation quickly involved us in an examination of the wide range of relationships concerning transportation in Canada. To discharge our specific responsibilities we were forced to undertake an examination of national transportation policy to test its historic role as a significant ingredient of national policy in the light of present circumstances. It is only within that broad context that we were able to devise an approach which led on to recommendations concerning the role for public policy in transportation today.

The conspectus of our conclusions is that most of the ills which beset transportation in Canada, particularly railway transportation – and the allegations of inequities which result – are caused by the failure of public and private attitudes to adjust to the realities of competition. The investigations we made and the inquiries we conducted, have consistently supported this conclusion. In the light of this, and in discharge of the important general and specific responsibilities laid upon us, we have set out the elements and objectives of a National Transportation Policy which we believe will achieve for the nation the benefits of efficient transportation services adequate for the promotion of industry and the development of resources. Further, recognizing the obligations of the nation for active promotion of economic development, we have set out what appear to us to be sound first principles for the use of transportation to this end under present circumstances.

The nature of the transportation industry, in the light of the role we believe it must play in Canadian economic development, affirms our conviction that there are benefits to be derived for the nation by the extension of competitive forces in transportation. Furthermore, we are convinced that the benefits of competition to the nation are substantially secure under the incentive of profit maximization and that this incentive can be made to work satisfactorily under a system of mixed private and public ownership, so long as publicly-owned transportation companies are instructed, permitted, and regulated to work under the criteria of normal business practices.

In order to secure the benefits of competitive prices and services for the shipping public and to spread them throughout every stratum of the economy, partiality of public treatment to transportation must be eliminated to the end that resources in transportation shall be efficiently allocated. This involves two major aspects of policy. First, the burdens being borne by any mode, because of law and public policy, must be offset by adequate recompense. It becomes a simple axiom of policy that, where the public obliges services to be continued beyond the commercial demand for them, the public shall pay. To do otherwise is to distort the true competitive competence of that mode.

Conversely, if public policy confers benefits upon any mode beyond the remuneration necessary for the performance of services, that mode is supported to a degree which misallocates resources in its favour. Public policy must ensure that it does not, through inadequate charges for capital funds or for use of public facilities, inequitably favour any mode, or firm, over others. National Transportation Policy must seek to achieve a position of economic neutrality wherever

competition prevails. Under conditions of essential neutrality there is no apparent reason why each mode of transport cannot compete on the basis of technological adaptability and managerial skill. So long as policy neutrality is preserved, new methods and modes of transport will be encouraged on the basis of their competitive ability and old modes will pass from the scene on the basis of competitive disability. Public policy should assiduously strive to be responsible for neither, except in those deliberate instances where, in the absence of satisfactory competition, developmental policies require it.

Looking beyond the present insofar as our vision takes us, there seems to be a commercially tenable position in the transportation complex for the railway as a mode of transport. Subject to that regulatory control which is the right of the public to expect in cases of significant monopoly, and subject to the legal restraints which must coexist with large aggregations of economic power, it is our conviction that the railway companies in Canada can find their rail operations a useful and profitable segment of their business. The movement of goods in trains over steel rails is still immensely economical under many types of circumstance. It appears to us that the railway as a mode of transport has before it a long and vigorous life if the companies are permitted to shed unremunerative plant and services and allowed by freer ratemaking to enter markets and price services in accord with the economic realities of railway operation. With this advantage we do not see why railway companies cannot find their railway operations profitable in free competition with other modes. However, such prospects are not possible so long as the remnants of obligations, placed upon rail operations by the national policies of a day when the railway offered the only practical means of overland transport, are not lifted. Embracing the limited controls on monopoly power specified throughout this Report, public policy must recognize that railway rates and services cannot now be determined and cannot now be controlled by considerations other than those set by commercial and competitive necessity. To legislate rates and ratemaking conditions freely into existence is to betray an attitude which is anachronistic under modern competitive conditions. It simply is not possible to ignore commercial principles in legislation and expect those same commercial principles to provide adequate rail revenues.

To achieve a workable neutrality in policy we have recommended generally and specifically without attempting to suggest that transportation problems can forever be resolved by any finite recommendations. Constant care, study and consideration must be given to keep pace with the dynamic nature of the transportation complex to maintain fair and impartial tax and regulatory policies between the modes of transport, and to carry out a constant evaluation of the effects of public assistance and user charges upon each mode. Without such constant care, misallocations and inequities will certainly arise and these will fall upon both shippers and carriers in the wake of the dynamic changes occurring in transportation.

Public policy is not the only factor which has a bearing either upon the efficiency of transportation as a whole, or on any particular segment of it. Even with the most assiduous attention to the principles of policy neutrality, the safe and healthy survival of any mode depends upon two other factors about which public policy can do very little. These factors are, first, the pace of technological change, and second, the attitudes and abilities of management and labour to adapt in the face of increasing competition.

The pace and direction of technology cannot be predicted with accuracy. Its effects upon organization and structure of any mode may be profound and rapid, and the relative importance of the mode may shift in a few years. The continuation of any mode of carriage will depend upon the persistence with which technological adaptation is sought and brought into operation. A relative decline in the speed of innovation in any mode may encumber it with a competitive disadvantage which no amount of rationalization can offset. Public policy does not have a responsibility to compensate for technological disadvantage.

Equally important is the other factor, managerial and labour attitudes towards adaptation and change. Both management and labour must recognize that attitudes of rigidity will introduce inefficiency which will put the means of their livelihood at a competitive disadvantage to others. Inefficiency which results from unwillingness or inability to change can be as damaging to prosperous and healthy competition as technological lag or inequitable public policy.

In short, the survival of any mode of transport, as with any productive process, can be threatened by the inequities created by any or all of three factors. In a dynamic economy, rigid public policy, rigidities against technological change, or rigid attitudes within the business organization, are each capable of rendering the mode unable to survive. The consequences of such rigidities, should they affect the railways in Canada, would be profound indeed. The importance of them as national institutions, and the instrumental part they play in the commerce of the nation may justify attempts to preserve the railway as a mode of carriage even if bad public policy, injudicious private attitudes, or the misfortune to be outpaced technologically renders them commercially unable to justify the investment made in them.

Should any one of these three factors in future force railway management to the conclusion that rail operations can no longer maintain a desirable commercial position in competition with extant or future modes of transport, it would be indefensible for the state to force management to continue operations. Taking into account all the other available transportation services necessary to provide for defence and civil emergencies, the nation must decide whether it is necessary to preserve a standby railway system. Considering the traditional place of railways in the nation it is difficult to imagine Canada without them, but the rapidity with which new techniques emerge may in time change this view. In any event, a most serious and careful evaluation must be given to the evidence before a decision is made. The Transportation Advisory Council will have a grave responsibility in advising the Government of Canada in the light of experience and the then current transportation situation.

If, in such circumstances, the nation should then decide that a system of railways is essential to Canadian national existence, the decision must be implemented by taking over from commercial management only those parts of the then existing railway systems which are deemed necessary for national purposes. Rigorous and accurate assessment will be necessary to include only those parts of the systems which are demonstrably vital to the national purpose. No attempt should be made to take over all of the rail systems that may then exist. They are apt to be more widespread than is necessary for non-commercial national purposes. Great pressure will have to be resisted in the interests of accepting only as much obligation for national railways as is necessary and the quality of political leadership will be tested in that day.

Having decided the necessary extent of the rail system to be preserved, there are a number of associated decisions which would then have to be made. In the first place it should be taken as axiomatic that the nation would not attempt to run a commercial rail transportation business after the best business leadership had been unable to do so. This means that the nation would not take over complete transportation companies, but only an essential skeletal rail system. In no event should any investment other than strictly rail-related investment be absorbed. Since only part of the rail system would be necessary for national purposes, only that part of the system ought to be the object of recompense to the companies concerned. Since the mode would have then demonstrated its commercial inferiority there would be no need for the nation to recompense owners, or continue to bear a national debt, on the basis of the original investment. The National Treasury should not be the medium for permitting management and shareholders to escape the consequences of investment which has proven to be commercially unprofitable, since the nation, with a neutral National Transportation Policy, bears no responsibility for failure. Under these conditions, then, the rail system would become a national instrument for national purposes, in the same way that the armed

forces or the post office are national instruments. Its capacity to fulfil an economic function would no longer be its primary purpose; its ability to do so would be incidental.

As an instrument of national policy the rail system would need to be given a new rationale for its operation. Obviously, under the sequence of these possible events, its rationale cannot be profit maximization. To attempt to force the nationalized rail system to operate by profit seeking criteria when it has clearly been shown unable to compete, would lead only to further declines in traffic, with consequent mounting deficits on its account. A rationale which seeks to price services by normal profit maximizing principles in the face of demonstrable commercial inferiority would neither move much traffic nor minimize the financial burden which the public treasury would then have to bear.

The rationale which would seem logical under those circumstances would be composed of two parts. First, the burden to the nation of the decision to maintain a nationalized rail system should approximate the fixed costs of its existence. What these shall be, and what shall be included in them, can only be determined in the face of such circumstances as might prevail at the time.

The second component of the rationale would be that the nationalized rail system should be utilized fully in the movement of goods so long as the burden of cost to the public treasury is not increased. Possessed of the bare essentials of a national rail system, and shorn of all other investments of every kind, the rail authority in charge of operations should be instructed to price services so that rates are set on the incremental, or additional, costs associated with the movement of any given traffic. Pricing under this principle would meet all the associated variable costs leaving the fixed costs to be borne as overhead by the nation. This would be the national price of rail preservation.

The advantage of this type of incremental pricing can only be seen in the perspective of the situation that forced management to abandon the railway as a commercial institution. If this situation should ever come about it will be because other modes will have proven sufficiently more flexible in service and price to outpace the railway as a competitive mode. By that time railway companies, seeing the trend, may be expected to have transferred investment in large part to other modes, which they should be free to operate in open competition. Modes powerful enough to displace the railway in competition can have no complaint if the pricing policy by rail holds or regains certain traffics. This is part of the political decision involved in accepting the railway as a national institution.

The opportunities for using incremental pricing policies on the nationalized rail system would hold certain compensations in stimulating development of industry and resources in the nation. Such pricing policies, extended to piggyback and container services, as to all traffic, would enhance the integration of the various modes, and leave to the other carriers a wide and profitable range within which to operate in reaching into all corners of the nation to provide all the necessary specialized services that modern industry increasingly demands. Into these fields the national system should not penetrate. Its economic purpose should be to provide low cost trunk line-haul transportation at incremental costs as a service to the shippers and to other carriers, while, at the same time maintaining a national rail system for whatever pertinent national reasons supported the decision to preserve it.

It was postulated at the outset of this section that we cannot and do not set out to forecast this trend of events in transportation, nor to predict the demise of any mode as a commercial enterprise. In our opinion, only the failure of public policy to bear equitably upon all modes, or the attitudes of management and labour, or technological imbalance will ever cause this sequence of events to occur. Of the three possibilities, the one most surely to force events towards the

situation which has been hypothecated is the inequitable incidence of public policy. It is in this area, not in the other two, where our responsibility lies, and where the direction of our investigations lay. It is our unanimous conclusion that no amount of flexibility and adaptability on the part of labour and management, and no amount of technological innovation and new capital investment can be effective in providing rail services as a rational part of the total transportation industry so long as public policy is inequitable. The need for rectification is immediate and continuing. To enable commercial principles to operate where competition is possible, the burdens imposed upon railways by law and public policy attuned to a monopolistic period must be lifted. For the future, continued assessment of the impact of public investment and regulation on all modes must be provided. Where competitive elements cannot operate due to the need for national development or due to the limited extent of the market, specific and definite investment and regulatory procedures are called for, in keeping with the principles of public utility regulation.

In our view complete nationalization of any mode of transport in Canada is not the best way to attain efficiency of services and optimum allocation of resources in transportation without the complete abandonment, so far as it is concerned, of the principles of profit maximization and dependence upon the market choices of shippers. It becomes consistent to replace these criteria with others only if, and when, any mode is demonstrably unable to survive in competition **and** that mode is deemed essential for national purposes. Then, and only then, should the nation adopt non-commercial criteria to enable the mode to serve the needs of commercial carriers and shippers to the fullest extent consistent with minimizing the national burden of the fixed charges associated with the decision to preserve the mode. Those fixed charges, then, become analogous to other types of public investment in transportation being supplied to various modes. Like these other types of public investment, its place in the scheme of developmental investment would need to be subject to rigid, continuing scrutiny to have it conform to its proper role in the National Transportation Policy.

ALL OF WHICH WE RESPECTFULLY SUBMIT FOR YOUR EXCELLENCY'S CONSIDERATION

*F. W. Anderson*

Chairman

*Hauscomb*

*W. D. Allen*

*G. H. Jones*

*H. A. Main*

*Neophytos*

F.W. Anderson  
Secretary and Director of Research

## Reservations and Observations

by Herbert Anscomb

I wish to refer to some of the conclusions arrived at by my colleagues in Part II of this volume with which I disagree.

There may well be some question of doubt whether under our Terms of Reference we should have dealt with some of the problems covered in our Report. It was found, however, to be quite impossible to deal with a subject of such magnitude as the railway problem without, willingly or not, going into some measure of economics in order to arrive at our conclusions.

In Chapter VII it is pointed out that government has historically provided from public funds certain transportation facilities to assist in the development of the nation and that assistance has been given to certain shippers and regions in paying part of their transportation costs. It may well be said that it is, perhaps, a legitimate function of government to provide transportation facilities especially if it appears that by so doing there is a reasonable chance of recovering in due time the advances so made. Certainly such facilities should not be provided from the public purse (government) if private enterprise is willing to provide them. Subject to that qualification, I take the view that there is no justification for government assisting individuals, industries or regions by paying part of their transportation costs. Transportation cost in many cases is a production cost the same as materials and labour and in many cases the government by assuming any part of such costs assists in the misallocation of the economic resources of the nation. Furthermore, the use of subsidies can and does result in administration difficulties and, consequently, increased costs (see CNR brief on cost to them of administering Subsidy Policies, Transcript of Evidence, Hearings, Vol. 111, p. 18511). This has arisen when in point of fact only one mode of carrier — the railways — were involved. If, as our Report suggests, these subsidies are to be paid to any mode of carriage the shipper may choose, it is simple to realize that these difficulties and costs will be further aggravated.

I now refer to specific problems namely the "bridge" subsidy, feed freight assistance and the Maritime Freight Rates Act.

Our Report recommends the repeal of the "bridge" subsidy. With that recommendation I heartily agree but hasten to add that in my opinion the same logic should have been applied with the feed freight assistance and the Maritime Freight Rates Act.

The Feed Grain Assistance programme was born of the war and was then undoubtedly justified. It may well have been justified for some time in the post-war period when Canada had commitments to the British Government for livestock and poultry products. Since that time, as I see it, there has been nothing to justify its continuance. Livestock and poultry production is relatively prosperous and certainly Canadians are not suffering from any shortage of supplies or paying exorbitant prices. As an example the cheap feed made available to farmers has had some effect on increasing dairy production which, in some cases, is already too high. We are faced with a situation where a department of the Federal Government is paying public funds to provide cheap feed to produce a product (butter) that normal markets cannot absorb. The result of this action requires additional heavy financing to purchase surplus butter and milk powder to keep the commercial market from collapsing. Such a procedure does not make economic sense. There is no doubt that such a freight assistance policy is beneficial to certain growers and consumers of feed grain and that the expenditure of public funds of such a magnitude (\$19 million, 1960) would be beneficial to any group fortunate enough to secure them. Many industries would, in like manner, benefit if the public purse was used

to pay their freight on raw materials moving to their plants but that would certainly not justify such action. I, therefore, am forced to the conclusion that this subsidy, like the "bridge" subsidy, should be abolished.

I will now deal with the Maritime Freight Rates Act. May I just state here that no matter what reasons were advanced for the assistance provided over a long period by the passage of this legislation – the most important point is that it has not brought prosperity to the Maritimes; neither, in my judgement, will it do so even if allowed to stand as it is or is extended in any form. It can be stated, I assume, without serious contradiction, that the industries in the Maritimes (Atlantic Provinces) that are soundly based due to availability of raw materials, lower labour costs, or other real economic advantages have prospered but those dependent mainly on a transportation subsidy have either not prospered or have not ever come into existence because of it.

The present situation in which under the Act a 20 per cent reduction of freight rates is given on certain "preferred movements" within the "select territory" cannot, in my view, possibly be justified. While no figures were actually available to the Commission as to the exact cost of this part of the subsidy, it was assumed to be between 45 and 50 per cent of the whole (\$14 million). Under no stretch of imagination could that method assist in the development of the Maritime Provinces and I agree with my colleagues in their suggestion of its repeal. I apply the same reasoning to the Province of Newfoundland, in which case, however, my colleagues support a continuation of the present policy for a further period of 10 years with a further review at the end of that time.

Since 1957 the reduction applied on outbound shipments has been at a rate of 30 per cent in order to assist the industrial life of the Atlantic Provinces to have that advantage in reaching the so-called Central Provinces (Ontario and Quebec). This, in my judgement, is unwarranted. Requests made to the Commission invariably asked that this rate be increased, indeed, in some cases to 100 per cent. In other words to place them in a position to compete with like industries in those Central Provinces on their own ground. In effect it means that the industrial life of Ontario and Quebec together with the rest of Canada would be called upon to pay a large percentage of the freight of their competitors in their own home market. Surely if such is to be the case why should not the same principle be applied to the two Western Provinces of British Columbia and Alberta – situated as they are at a greater distance than the Maritimes from the central markets – who have built and are building an industrial life which on the same ground could well ask to be allowed to invade the central areas on the same terms.

Let there be no misunderstanding and I desire to make it clear, abundantly clear, that I regret as does every Canadian that there are sections of the nation that have not prospered as well as others for many and varied reasons and all would gladly support any programme designed to help, provided assurance could be given that such policies would remove the cause of their difficulties, but I am convinced that tinkering with an amount of assistance given to pay transportation charges will solve nothing and history to date has proved that to be so; to do this can only be a detriment to other sections of the country and will provide no real or effective relief to the recipients.

## APPENDIX A

## COMMISSIONERS

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 Archibald H. Balch  
 René Gobeil  
 Howard Mann  
 Arnold Platt

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**SUBMISSIONS****APPENDIX B****Submissions received at public hearings**

Industrial and Trade Bureau of Greater Quebec, Inc.  
Thetford Mines Chamber of Commerce  
Quebec Lumber Manufacturers' Association  
Clarke Steamship Company Limited and Associated Companies  
The Government of the Province of New Brunswick  
The Saint John Board of Trade  
The Record Store & Furnace Company Limited,  
Enamel and Heating Products Limited,  
The Enterprise Foundry Company, Limited  
Connor Bros. Limited, Canners & Packers,  
Brunswick Brand Sea Foods  
Maritime Lumber Bureau  
Fredericton Board of Trade  
The City of Fredericton  
Acadia-Atlantic Sugar Refineries Limited and  
Atlantic Sugar Refineries Limited  
T. McAvity & Sons, Limited  
The New Brunswick Potato Shippers' Association  
The New Brunswick Potato Marketing Board  
New Brunswick Seed Growers' Co-operative Ltd.  
The Saint John Local Employment Committee  
Peat Moss Industry  
The Government of the Province of Prince Edward Island  
The Charlottetown Board of Trade  
The Summerside Board of Trade  
Canadian Trucking Associations, Inc., Charlottetown, P.E.I.  
The Government of the Province of Nova Scotia  
Weymouth Industries Limited  
Annapolis Valley Canners Ltd., Canada Foods Limited,  
M.W. Graves & Co. Limited, Scotia Gold Co-operative Ltd.  
The Cape Breton Island Industrial Development Council  
Canadian Trucking Associations, Inc., Sackville, N.B.  
Nova Scotia Fish Packers Assoc.  
Avon Valley Greenhouses Ltd.  
H. Loomer Greenhouses Limited  
The New Industries Committee, Sydney City Council  
Nova Scotia Boatbuilders Association

The Government of the Province of Newfoundland  
Longshoremen's Protective Union of St. John's, Nfld.  
Blue Peter Steamships Limited, Bowring Brothers Limited,  
Fishery Products Limited, Furness, Withy & Company, Limited,  
Harvey Steamships Limited, A. Harvey & Company Limited,  
Longshoremen's Protective Union, Murray Agencies & Transport  
Company Limited, Newfoundland Great Lakes Company Limited  
Joint Submission of Canadian National Railways and  
of Canadian Pacific Railway Company  
Canadian National Railways  
Canadian Pacific Railway Company  
The Government of the Province of Manitoba  
City of St. James  
Manitoba Federation of Agriculture  
Manitoba Farmers' Union  
The Brandon Chamber of Commerce and City of Brandon  
Manitoba Pool Elevators  
The Manitoba Beet Growers Association Incorporated  
Winnipeg Chamber of Commerce  
The Government of the Province of Saskatchewan  
The Saskatoon Board of Trade and the City of Saskatoon  
The Canadian Co-operative Implements Limited  
Hudson Bay Route Association  
Saskatchewan Timber Board  
Regina Chamber of Commerce  
Saskatchewan Farmers' Union  
Great West Coal Company, Limited  
Old Mac Coal Limited, Western Dominion  
Coal Mines Limited and Manitoba and  
Saskatchewan Coal Company (Limited)  
The Government of the Province of Alberta  
The Farmers' Union of Alberta  
Lethbridge Chamber of Commerce  
Alberta Wheat Pool  
Victoria Chamber of Commerce  
The Government of the Province of British Columbia  
The Vancouver Board of Trade  
British Columbia Lumber Manufacturers Association,  
Plywood Manufacturers Association of British Columbia and  
Consolidated Red Cedar Shingle Association of British Columbia  
B.C. Tree Fruits Ltd.  
Surrey Co-operative Association

Cariboo-P.G.E. Lumber Manufacturers' Association  
Malcolm F. Green  
The Government of the Province of Ontario  
The St. Catharines and District Chamber of Commerce  
The Southwestern Ontario Associated Chambers of Commerce  
The Toronto Harbour Commissioners  
Ontario Federation of Agriculture  
Board of Trade of Metropolitan Toronto  
Hamilton Chamber of Commerce  
Canadian Electrical Manufacturers Association  
Canadian Transport Tariff Bureau  
The Hot Coal Company  
Canadian Metal and Mining Association  
The Live Stock Industry of the Province of Ontario  
The Government of the Province of Quebec  
Chamber of Commerce of the Gaspé Region  
The Regional Chambers of Commerce of the Saguenay –  
Lake St. John Districts  
Chamber of Commerce of Lake Etchemin  
The Economic Orientation Council of the Lower St. Lawrence  
Trucking Association of Quebec, Inc.  
Canadian Lumbermen's Association  
Interior Lumber Manufacturers' Association  
Canadian Granite Industries Association  
The Canadian Horticultural Council and  
The Canadian Fruit Wholesalers' Association  
The Canadian Industrial Traffic League  
The Canadian Manufacturers' Association  
The Transportation Committee of the Kamouraska,  
Témiscouata-Rivière-du-Loup Counties (Que.),  
Northern New-Brunswick and Northern Maine (U.S.A.)  
Regions and The Chamber of Commerce of  
Rivière-du-Loup (P.Q.)  
Canadian Federation of Agriculture  
Canada and Dominion Sugar Company Limited  
The Industrial and Trade Bureau of Greater Quebec, Inc.  
Canadian Trucking Associations Inc.  
N.R. Wilson, Mayor, Port Arthur, Ontario  
D.M. Fisher, M.P., Port Arthur, Ontario  
H. Badanai, M.P., Fort William, Ontario  
Northwestern Ontario Development Association

Joint Transportation Committee, Fort William –  
Port Arthur Chambers of Commerce  
Western Quebec Forestry Association Inc.  
The Quebec Lumber Manufacturers' Association  
United Grain Growers Limited  
Maritimes Transportation Commission  
Dominion Steel and Coal Corporation, Limited  
Alberta Wheat Pool, Manitoba Pool Elevators,  
Saskatchewan Wheat Pool and United Grain Growers  
Joint Submission by the Provinces of Manitoba and Alberta  
Saskatchewan Wheat Pool  
J. Ferguson Browne, M.P., Vancouver-Kingsway, British Columbia

**Other submissions received**

The Saskatchewan Seed Grain Co-Operative Limited  
Saskatchewan Forage Crop Growers' Co-Op Marketing Association Limited  
Northern Wood Preservers Limited  
International Railway Unions  
Oshawa and District Labour Council  
Canada Steamship Lines Limited  
The Canadian Conference of Teamsters  
Legrade Incorporated  
Georgian Bay Development Association  
The Grand Manan Board of Trade  
The Edmonton Chamber of Commerce  
Canadian Brotherhood of Railway,  
Transport and General Workers









